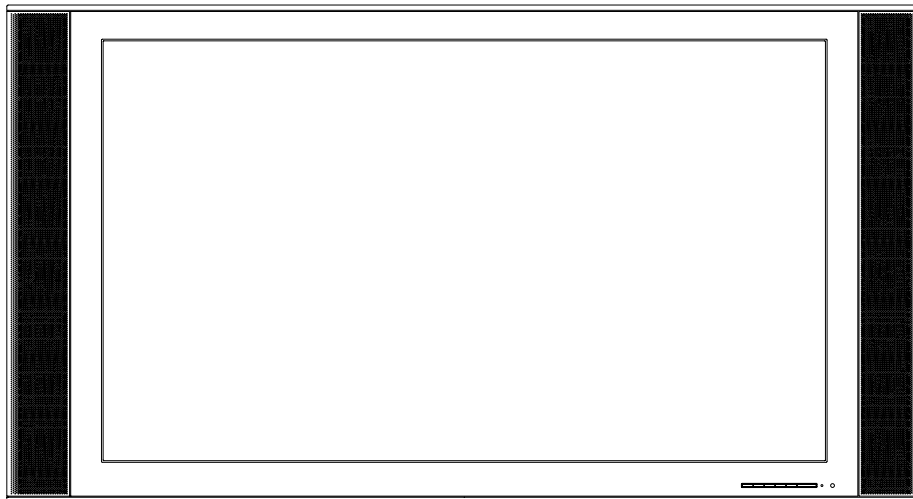


# HITACHI

## 42PD380TA

# SERVICE MANUAL

**42" PLASMA COLOR TELEVISION**



**ORIGINAL  
MFR'S VERSION A**

## SERVICING NOTICES ON CHECKING

### 1. KEEP THE NOTICES


As for the places which need special attentions, they are indicated with the labels or seals on the cabinet, chassis and parts. Make sure to keep the indications and notices in the operation manual.

### 2. AVOID AN ELECTRIC SHOCK

There is a high voltage part inside. Avoid an electric shock while the electric current is flowing.

### 3. USE THE DESIGNATED PARTS

The parts in this equipment have the specific characters of incombustibility and withstand voltage for safety. Therefore, the part which is replaced should be used the part which has the same character.

Especially as to the important parts for safety which is indicated in the circuit diagram or the table of parts as a  mark, the designated parts must be used.

### 4. BE CAREFUL WITH THE PDP PANEL

1. When you handle the PDP Filter you must wear the gloves twice, because, you are to avoid soil it by your sweat and dust.
2. When you lift the PDP Filter you should hold it with the palm of your hand.  
Don't pick up it with your fingers.
3. The back side of PDP Filter tends to damaged. Since there is no coating.  
Therefore, it put into the packing box at the time of delivery, without piling up even at the time of unused.  
Also, when you take out it from a packing box, be careful of the rubbing.
4. When the surface becomes dirty, wipe it with a soft cloth as you draw a circle.  
When it is dirty hardly, wipe it with a cloth ethanol infiltrated.  
Don't use ethanol for the back side.
5. Do not apply it to direct sunshine so that the characteristic may change.
6. When you inspect the surface (the scratch, the dirt and the air bubble), use the fluorescent light.
7. When you use SCREW DRIVER and SCREW, be careful of a metallic powder being mixed.
8. Do not damage the PDP Module with a DRIVER.
9. Do Handling with the PDP Module by 2 persons.
10. There is a step difference between the cover and PDP Module.  
So, when you remove the screws, place a cushion on it so that the PDP Module is not being scratched.  
Then remove the screws carefully.

11. When you remove the cover, do not scratch the FPC on both ends of PDP Module.

12. Hold the four ends holder and be careful not to touch the glass area.

13. Take care for the damage of vacuum exhaust pipe due to a collision.

14. Moisture condensation may damage the PDP Module.

So, leave it for 48 hours at the service room.

### 5. PUT PARTS AND WIRES IN THE ORIGINAL POSITION AFTER ASSEMBLING OR WIRING

There are parts which use the insulation material such as a tube or tape for safety, or which are assembled in the condition that these do not contact with the printed board.

The inside wiring is designed not to get closer to the pyrogenic parts and high voltage parts. Therefore, put these parts in the original positions.

### 6. PERFORM A SAFETY CHECK AFTER SERVICING

Confirm that the screws, parts and wiring which were removed in order to service are put in the original positions, or whether there are the portions which are deteriorated around the serviced places serviced or not. Check the insulation between the antenna terminal or external metal and the AC cord plug blades. And be sure the safety of that.

#### (INSULATION CHECK PROCEDURE)

1. Unplug the plug from the AC outlet.
2. Remove the antenna terminal on TV and turn on the TV.
3. Insulation resistance between the cord plug terminals and the external exposure metal **[Note 2]** should be more than 2.5M ohm by using the 500V insulation resistance meter **[Note 1]**.
4. If the insulation resistance is less than 2.5M ohm, the inspection repair should be required.

#### **[Note 1]**

If you have not the 500V insulation resistance meter, use a Tester.

#### **[Note 2]**

External exposure metal: Antenna terminal  
Screw  
21pin jack  
Side RCA jack  
Rear RCA jack  
Headphone jack

## HOW TO ORDER PARTS

Please include the following informations when you order parts. (Particularly the VERSION LETTER.)

1. MODEL NUMBER and VERSION LETTER

The MODEL NUMBER can be found on the back of each product and the VERSION LETTER can be found at the end of the SERIAL NUMBER.

2. PART NO. and DESCRIPTION

You can find it in your SERVICE MANUAL.

## IMPORTANT

When you exchange IC and Transistor with a heat sink, apply silicon grease (YG6260M) on the contact section of the heat sink. Before applying new silicon grease, remove all the old silicon grease. (Old grease may cause damage to the IC and Transistor).

## PANEL LOCK

To unlock the Password of Panel Lock, please follow the steps below.

1. Turn Unit ON.
2. Press and hold the 'VOLUME DOWN' key on the front panel for more than 10 seconds.
3. The Panel Lock has now been cleared.
4. Press and hold the 'VOLUME DOWN' key on the front panel.
5. Simultaneously press and hold the '0' key on the remote control unit.
6. Hold both keys for more than 2 seconds.
7. The Password of Panel Lock has now been cleared.

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## GENERAL SPECIFICATIONS

G-1	TV System	PDP	PDP Size / Visual Size		41.58 inch / 1056.1 mmV
			Number of Pixels(H x V)		852(H) x 480(V)
		Color System			PAL/SECAM/NTSC
		Speaker			4 Speaker
			Position		Front Side
		Main	Size		2.2 x 5.0 inch
			Impedance		4 ohm
		Tweeter	Size		2.0 inch
			Impedance		8 ohm
		Sound Output			MAX
			10%(Typical)	---	
NTSC3.58+4.43 /PAL60Hz			Yes		
G-2	Tuning System	Broadcasting System			U.K., CCIR, US System
					B/G, D/K, I/I, M
		Tuner and Receive CH	System		1Tuner
			Destination		UK, CCIR Hyper, USA
			CH Coverage		1~S6, S7~S36, S37~E69
		Intermediate Frequency			PAL/SECAM(U&VH)/NTSC
			Picture(FP)		38.9/38.9/38.9/38.9MHz
			Sound(FS)		33.4/32.9/32.4/34.4MHz
			FP-FS		5.5/6.0/6.5/4.5MHz
		Auto Tuning Method			ALL Band (Not C.C.I.R. CH Plan)
Preset CH			110		
Stereo/Dual TV Sound			NICAM/A2 Dual		
Tuner Sound Muting			Yes		
G-3	Power	Power Source	AC	100-240V AC 50/60Hz	
			DC	---	
		Power Consumption		at AC	250 W at AC 100-240 V 50/60 Hz
				at DC	--
			Stand by (at AC)	1 W at AC 100-240 V 50/60 Hz	
		Per Year	-- kWh/Year		
		Energy Star	Yes		
Protector	Power Fuse	Yes			
	Safety Circuit	Yes			
	IC Protector(Micro Fuse)	No			
G-4	Regulation	Safety	IEC60065,GOST, CB, AS/NZS, PSB		
		Radiation	CISPR, GOST, AS/NZS, PSB		
		X-Radiation	---		
G-5	Temperature	Operation	+5oC ~ +40oC		
		Storage	-20oC ~ +60oC		
G-6	Operating Humidity		Less than 80% RH		

## GENERAL SPECIFICATIONS

G-7	On Screen Display	Menu (TV)		Yes
		Menu Type		Icon
		Picture		Yes
		Brightness		Yes
		Contrast		Yes
		Color		Yes
		Tint (NTSC, COMPONENT, HDMI)		Yes
		Sharpness		Yes
		DNR On/Off		Yes
		Color Temperature		Yes
		Blue Back		No
		Film Mode		Yes
		Audio		Yes
		NICAM Auto/Off		Yes
		Bass		Yes
		Treble		Yes
		Balance		Yes
		Perfect Volume		Yes
		Surround On/Off		No
		Speakers On/Off		Yes
		HDMI		Yes
		BBE		No
		WOW SRS 3D		Yes
		WOW Focus		Yes
		WOW Trubass		Yes
		Setup		Yes
		Auto Tuning		Yes
		Manual Tuning		Yes
		Sort(CH Allocation)		Yes
		Backlight		No
		Text Language		Yes
		Language		Yes
		Position (Vertical Position)		Yes
		Auto 4:3 Default		No
		AV2 Output		No
		AV2 Input		No
		Color System(AV Color)		Yes
		Inversion		No
		Screen Wipe(Full White)		Yes
		Screen Saver		Yes
		Static Image		Yes
		Option		Yes
		On Timer		Yes
		Off Timer		Yes
		Panel Lock		Yes
		Menu (PC)		Yes
		Picture		Yes
		Brightness		Yes
		Contrast		Yes
		HOR Position		Yes
		VER Position		Yes
		Clock Phase		Yes
		Horizontal Clock		Yes
		AUTO ADJUST		No
		Amplitude Red		Yes
		Amplitude Green		Yes
		Amplitude Blue		Yes
		WXGA Mode		Yes
		WVGA Mode		Yes
		Audio		Yes
		NICAM Auto/Off		No
		Bass		Yes
		Treble		Yes
		Balance		Yes
		Perfect Volume		Yes
		Surround On/Off		No
		Speakers On/Off		Yes
		HDMI		Yes
		BBE		No
		WOW SRS 3D		Yes
		WOW Focus		Yes
		WOW Trubass		Yes

## GENERAL SPECIFICATIONS

	Control Level		Yes
	Volume		Yes
	Brightness		Yes
	Contrast		Yes
	Color		Yes
	Tint (NTSC Only)		Yes
	Sharpness		Yes
	Tuning		Yes
	Bass		Yes
	Treble		Yes
	Balance		Yes
	HOR Position		Yes
	VER Position		Yes
	Clock Phase		Yes
	Horizontal Clock		Yes
	Amplitude Red		Yes
	Amplitude Green		Yes
	Amplitude Blue		Yes
	Backlight		No
	Nicam ST		Yes
	Tone 1/2		Yes
	Pin Code		No
	Freeze		No
	CH/AV/PC		Yes
	Hotel Lock		No
	Wide Mode		Yes
	Sleep Timer		Yes
	Sound Mute		Yes
	Input Select		Yes
	NOT AVAILABLE		Yes
<b>G-8</b>	<b>OSD Language</b>		English / Chinese(Simplified) / Chinese(Traditional) / Russia
<b>G-9</b>	<b>Clock and Timer</b>	Sleep Timer	Max Time Step
		On/Off Timer	Program(On Timer / Off Timer)
		Wake Up Timer	No
		Timer Back-up (at Power Off Mode)	more than -- Min Sec

## GENERAL SPECIFICATIONS

G-10	Remote Control	Unit	RC-MA
		Glow in Dark Remocon	No
		Remocon Format	HITACHI
		Format	HITACHI
		Custom Code	50-AF.h
		Power Source	Voltage(D.C) UM size x pcs
			3V UM-4 x 2 pcs
		Total Keys	32
		Keys	Power ( Stand By )
			Yes
		1	Yes
		2	Yes
		3	Yes
		4	Yes
		5	Yes
		6	Yes
		7	Yes
		8	Yes
		9	Yes
		0	Yes
		Volume Up / Right	Yes
		Volume Down / Left	Yes
		Sleep	Yes
		Recall (CH Call)	Yes
		Menu	Yes
		Enter	Yes
		Mute	Yes
		Picture Size	Yes
		Fine Tuning +	No
		Fine Tuning -	No
		Input Select	Yes
		Multi Picture	No
		Picture Position	No
		Picture Main/Sub	No
		T*TEXT Keys	TEXT / MIX / TV
			Yes
		CH Up / Page Up / Up	Yes
		CH Down / Page Down / Down	Yes
		Red	Yes
		Green	Yes
		Yellow	Yes
		Blue	Yes
		F/T/B(Expand) / Normal	Yes
		Reveal / Skip	Yes
		Reset / Audio 1/2	Yes
		Hold / Status	Yes
		Sub Page / Quick View	Yes
G-11	Features	Auto Shut Off	Yes
		BBE	No
		SRS WOW(SRS 3D/Focus/Tru Bass)	Yes
		Variable Audio Out	Yes
		Auto Search	Yes
		CH Sort(CH Allocation)	Yes
		Channel Lock	No
		Just Clock Function	No
		Game Position	No
		CH Label	No
		T*Text	Yes
		Text type	Fastext / Toplevel
		Text Language	English , French, Swedish, Hungarian Finnish, Turkish, German, Dutch Portuguese, Spanish, Italian, Greek Polish, Russian, Bulgarian, Serbian, Croatian, Slovene, Czech, Slovakian, Rumanian.
		Wide Mode	Yes
		Picture Scroll	Yes
		DNR	Yes
			3D
		Comb Filter	Yes
			5 Lines
		Surround	No
		Backlight	No
		Perfect Volume(Stable Sound)	Yes
		PFC(Power Factor circuit)	Yes
		Auto Set Up	No
		Power On Memory	Yes
		Hotel Lock	No
		PC Monitor Input	Yes
		Freeze frame	No



## GENERAL SPECIFICATIONS

G-12	Accessories	Owner's Manual		Language	English / Chinese(Simplified) / Chinese(Traditional) / Russia		
				w/Guarantee Card	No		
		Remote Control Unit			Yes		
		Rod Antenna			No		
				Poles	-		
				Terminal	-		
		Loop Antenna (W/ Antenna Change Plug)			No		
				Terminal	-		
		U/V Mixer			No		
		DC Car Cord (Center+)			No		
		Guarantee Card			No		
		Warning Sheet			No		
		Circuit Diagram			No		
		Antenna Change Plug			No		
		Service Facility List			No		
		Important Safeguard			No		
		Dew/AHC Caution Sheet			No		
		Quick Set-up Sheet			No		
		Battery			Yes		
				UM size x pcs	UM-4 x 2 pcs		
				OEM Brand	Yes(Maxell)		
		AC Adapter			No		
		AC Cord (for AC Adapter)			No		
		AC Cord			Yes		
		AV Cord (2Pin-1Pin)			No		
		HDMI-DVI Cable			No		
		Registration Card			No		
		300 ohm to 75 ohm Antenna Adapter			No		
G-13	Interface	Switch	Front	Sub Power (Tact)	Yes		
				System Select	No		
				Main Power SW	No		
				Channel Up/Menu Up	Yes		
				Channel Down/Menu Down	Yes		
				Volume Up/Menu >	Yes		
				Volume Down/Menu <	Yes		
				Input Select	Yes		
				Menu	No		
				Rear	Main Power SW	Yes	
		Indicator		Power / Stand-by	Yes(GREEN / RED)		
				On Timer	No		
		Terminals	Rear	Video Input 1	RCA x 1		
				Audio Input	RCA x 2(L/MONO, R)		
				S- Input	Yes		
				Video Input 2	RCA x 1		
				Audio Input	RCA x 2(L/MONO, R)		
				S- Input	Yes		
				Video Output	RCA x 1		
				Audio Output	RCA x 2(Variable L, R)		
				Component In 1	RCA x 3		
				Audio Input (Component In use)	RCA x 2(L/MONO, R)		
				Component In 2	RCA x 3		
				Audio Input (Component In use)	RCA x 2(L/MONO, R)		
				Other Terminal	No		
				Euro Scart (21Pin)	No		
				HDMI Input(w/ Analog Audio L/R)	Yes		
				Sub Woofer Out	No		
				PC Monitor Input (D-Sub)	Yes		
				Audio Input	Mini Pin Jack(d=3.5), STEREO		
				Diversity	No		
				Ext Speaker	No		
				DC Jack 12V(Center +)	No		
				VHF/UHF Antenna Input	DIN Type		
					AC Inlet	Yes	
					Side	Video Input 3	RCA x 1
						Audio Input	RCA x2(L/MONO,R)
						S- Input	Yes
						Other Terminal	Headphone
G-14	Set Size	Approx. W x D x H (mm)		1,210 x 115 x 658			
G-15	Weight	Net Approx.		34.0kg (75.0 lbs)			
		Gross Approx.		41.0kg (90.4 lbs)			

## GENERAL SPECIFICATIONS

G-16	Carton	Master Carton		No
		Content	--- Sets	
		Material	--- / ---	
		Dimensions W x D x H(mm)	---	
		Description of Origin	---	
		Gift Box		Double/Brown
		Material	Double/Brown	
		Dimensions W x D x H(mm)	1,320 x 380 x 780	
		Design	As per Buyer's	
		Description of Origin	No	
		Drop Test		Natural Dropping At 1 Corner / 3 Edges / 6 Surfaces
		Height (cm)	31(ORION SPEC:25)	
G-17	Material	Container Stuffing		158 Sets/40' container
		Cabinet	Cabinet Front	PC+ABS 94V0 Non-Halogen
			Cabinet Rear	Steel
		PCB	Non-Halogen	No
			Eyelet	Yes
G-18	Environment	Environmental standard requirement		Green procurement of HITACHI
		Pb-free		Phase3(Phase3A)
		WEEE		No

# DISASSEMBLY INSTRUCTIONS

## 1. EXCHANGE METHOD OF PDP MODULE

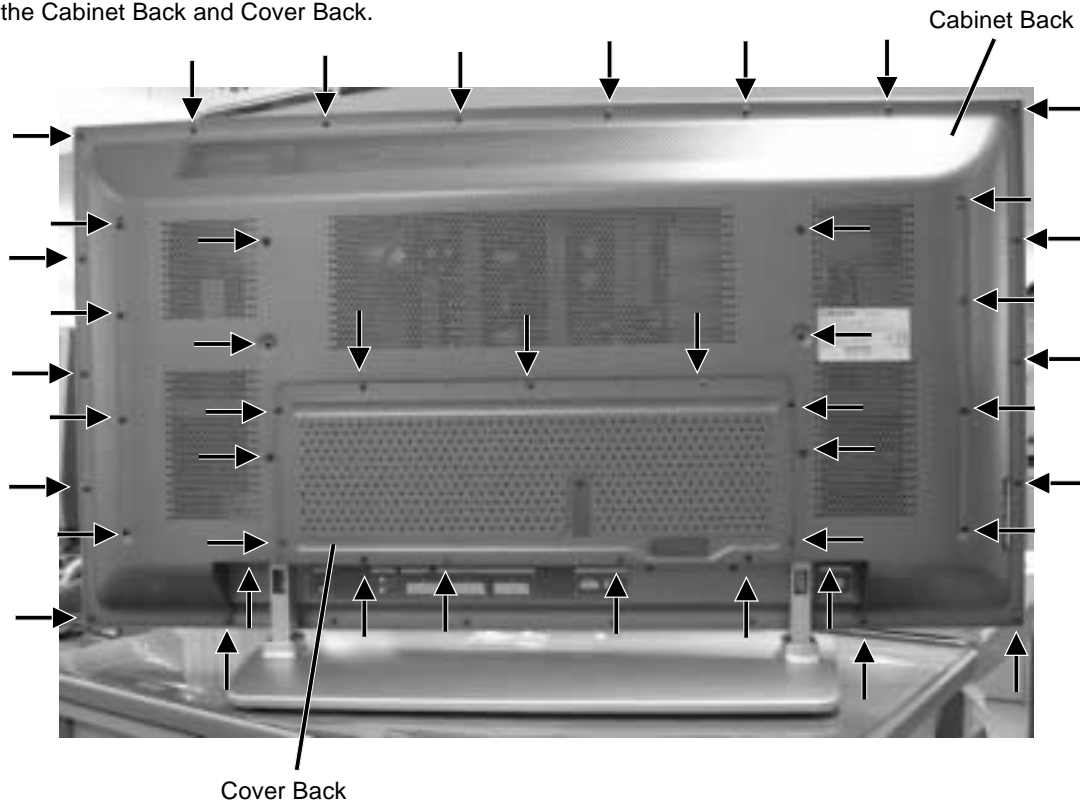
### NOTE

1. Do handling with the PDP Module by 2 persons.

## REMOVAL METHOD OF PDP MODULE

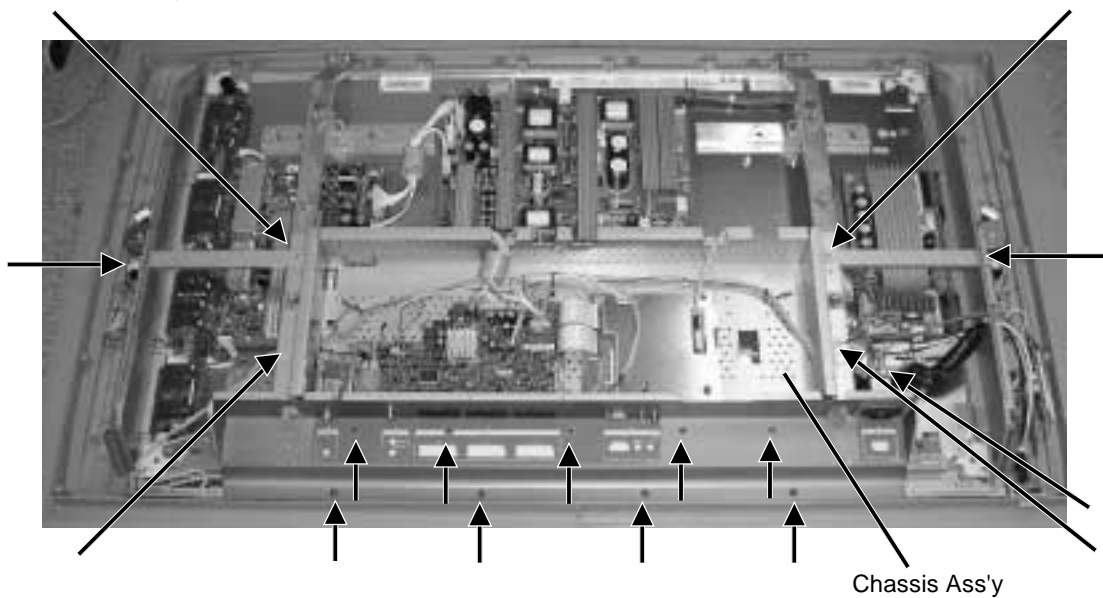
### 1-1: CABINET BACK/COVER BACK

1. Remove the screw.
2. Remove the Cabinet Back and Cover Back.



### 1-2: CHASSIS BLOCK

1. Disconnect the connector.
2. Remove the screw.
3. Remove the Chassis Ass'y.



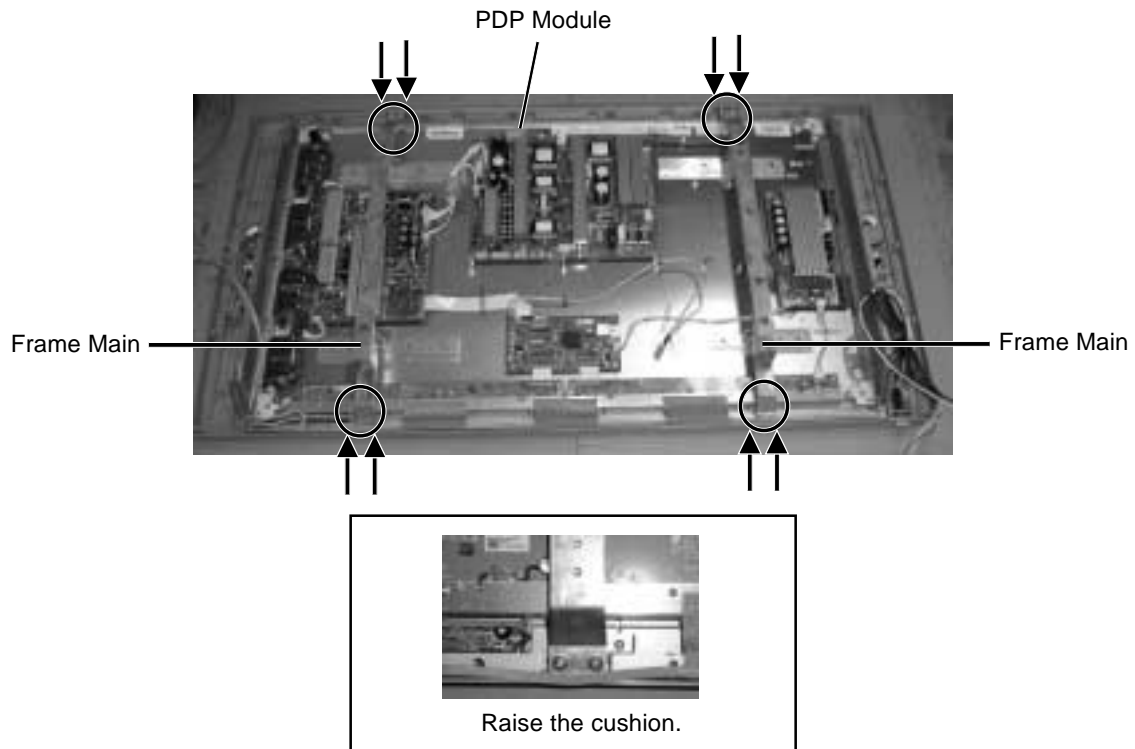
## DISASSEMBLY INSTRUCTIONS

### 1-3: PDP MODULE

1. Remove the Tape.
2. Remove the screw.
3. Hold the Frame Main carefully and remove the PDP Module.

#### NOTE

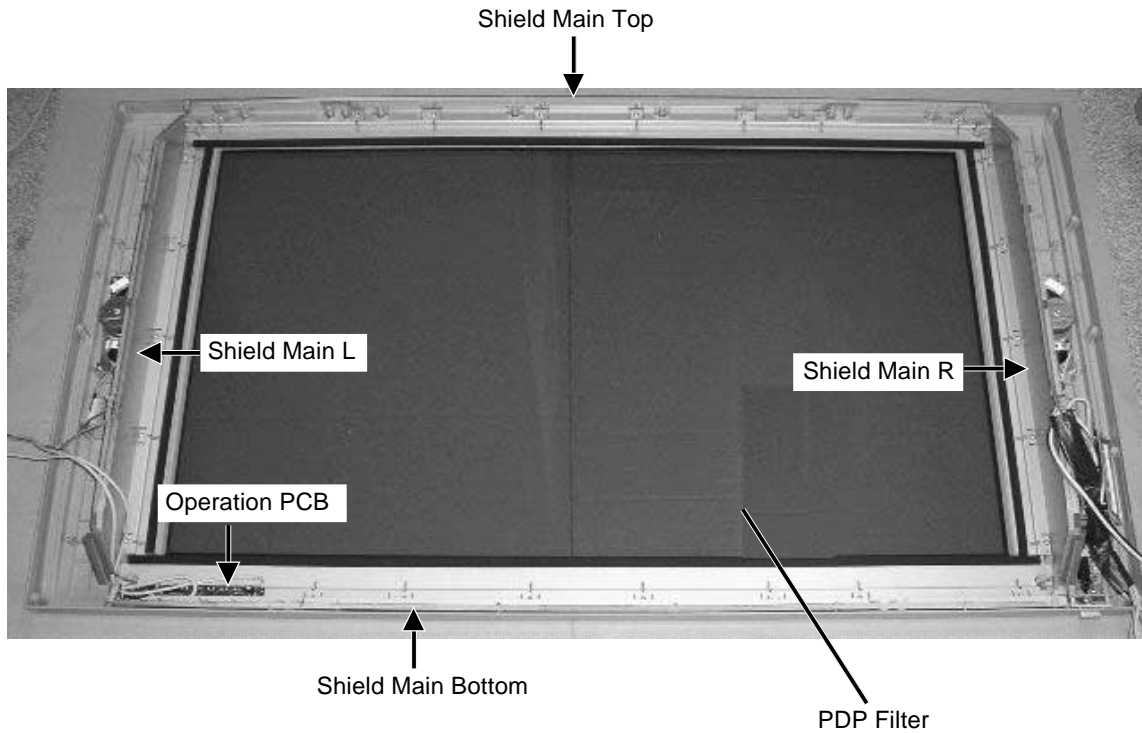
1. When remove the PDP Module, raise the cushion carefully so that having a scratch on the face.



## DISASSEMBLY INSTRUCTIONS

### 1-4: PDP FILTER

1. Remove the Operation PCB.
2. Remove the screw.
3. Remove the Shield Main.
4. Remove the PDP Filter.



# DISASSEMBLY INSTRUCTIONS

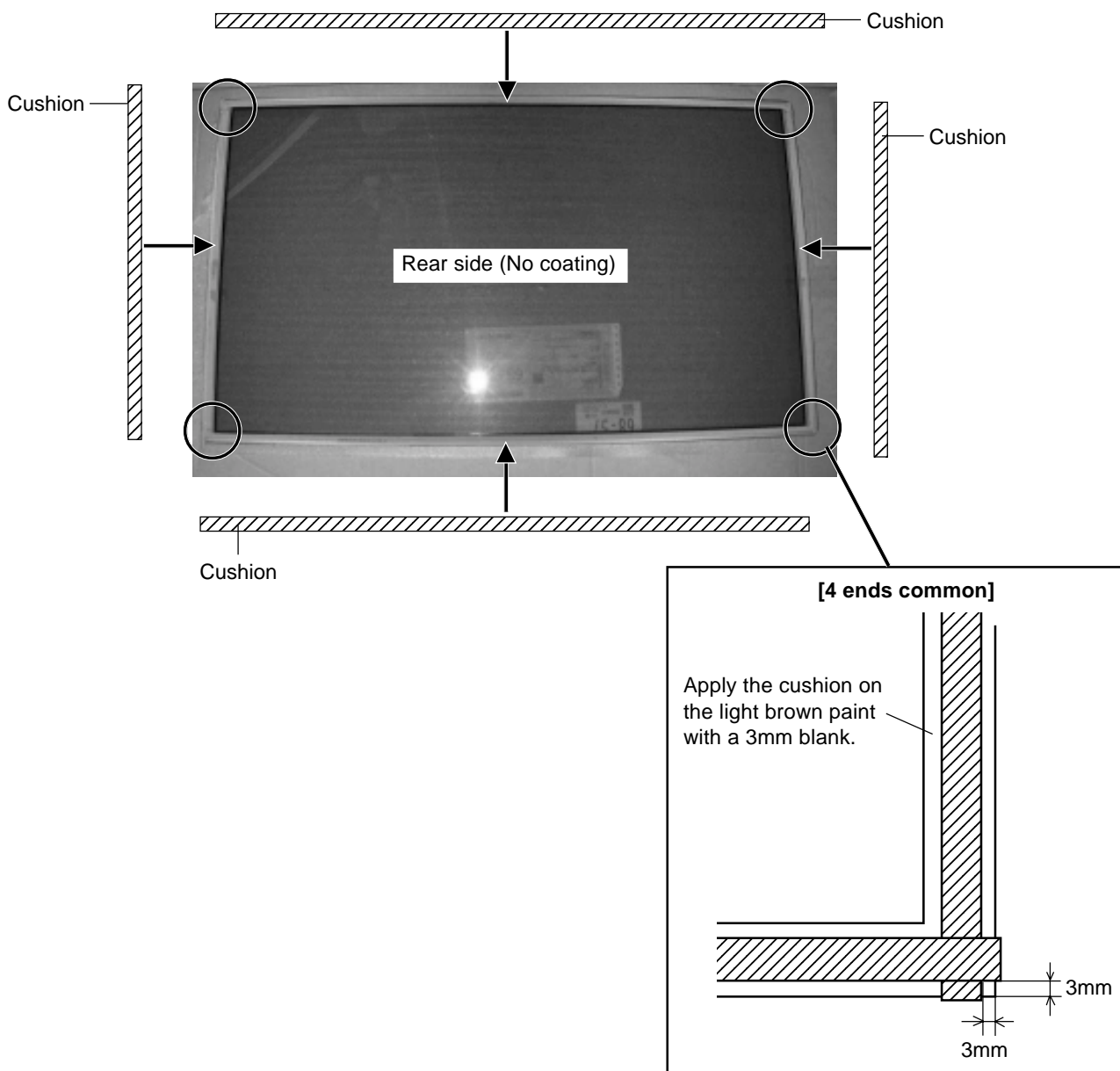
## INSTALLATION METHOD OF PDP MODULE

### NOTES FOR NEW PDP FILTER HANDLING

1. When you handle the PDP Filter you must wear the gloves twice, because you are to avoid soiling it by your sweat and dust.
2. When you lift the PDP Filter you put it between the palm of your hand. Don't pick up it with your fingers.
3. The back side of PDP Filter tends to get damaged. Since there is no coating. Therefore, it is put into the packing box at the time of delivery, without piling up even at the time of unused. Also, when you take out it from a packing box, be careful of the appearance which can not rub it.
4. When the surface becomes dirty, be the cloth out of which it is soft and dust does not come, and as you draw a circle, wipe it. When hard dirty, infiltrate ethanol etc. into cloth lightly and wipe. Don't use ethanol for the back side.
5. Do not apply it to direct sunshine so that the characteristic may change.
6. When you inspect the scratch and the dirt, the air bubble of the PDP Filter surface that use the light.

### 1-5: PDP FILTER (PREPARATION)

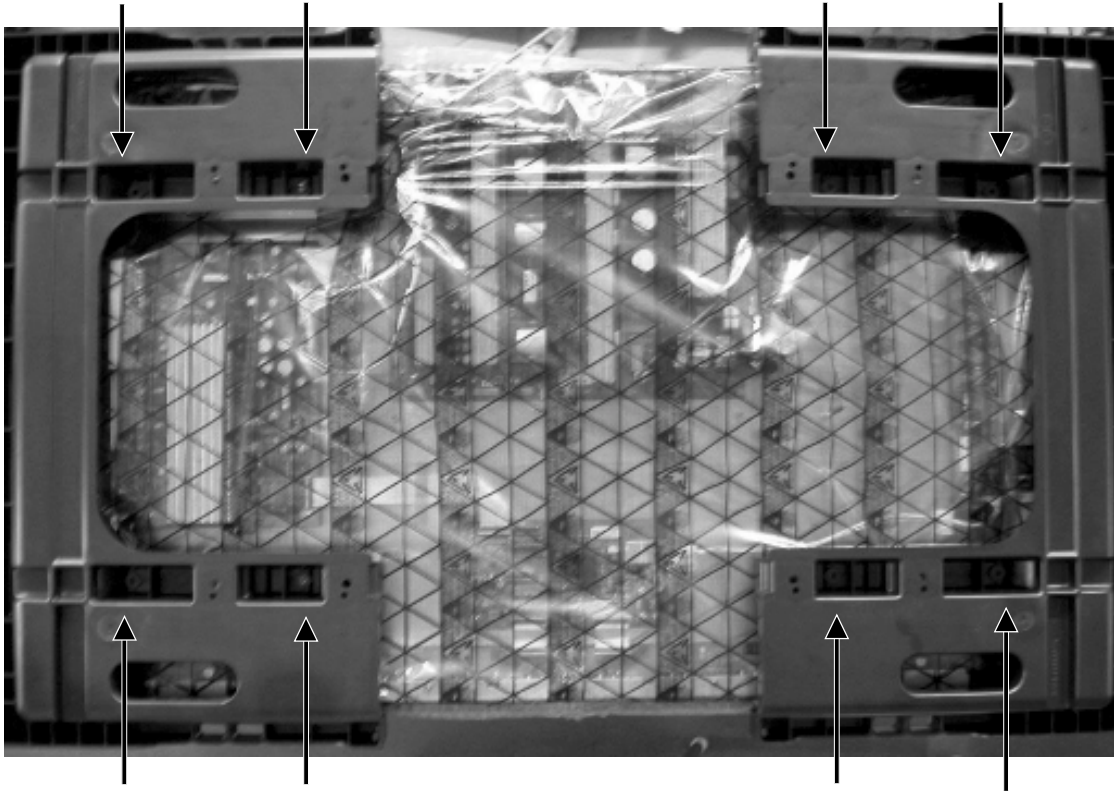
1. Fix the Cushion. (Order the cushion newly.)



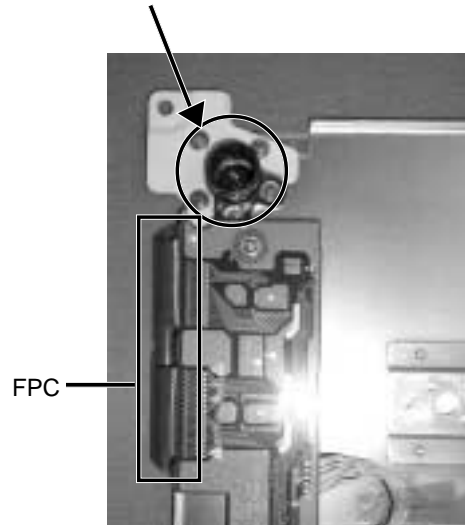
# DISASSEMBLY INSTRUCTIONS

## NOTES FOR NEW PDP MODULE HANDLING

1. Do handling with the PDP Module by 2 persons.
2. There is a step difference between the cover and PDP Module. So, when you remove the screws, place a cushion on it so that the PDP Module is not being scratched. Then remove the screws carefully.
3. When you remove the cover, do not scratch the FPC on both ends of PDP Module.
4. Hold the four ends holder and be careful not to touch the glass area.
5. Take care for the damage of vacuum exhaust pipe due to a collision.
6. Moisture condensation may damage the PDP Module. So, leave it for 48 hours at the service room.
7. Re-use the cover, vinyl sheet, and screws for returning of the PDP Module.



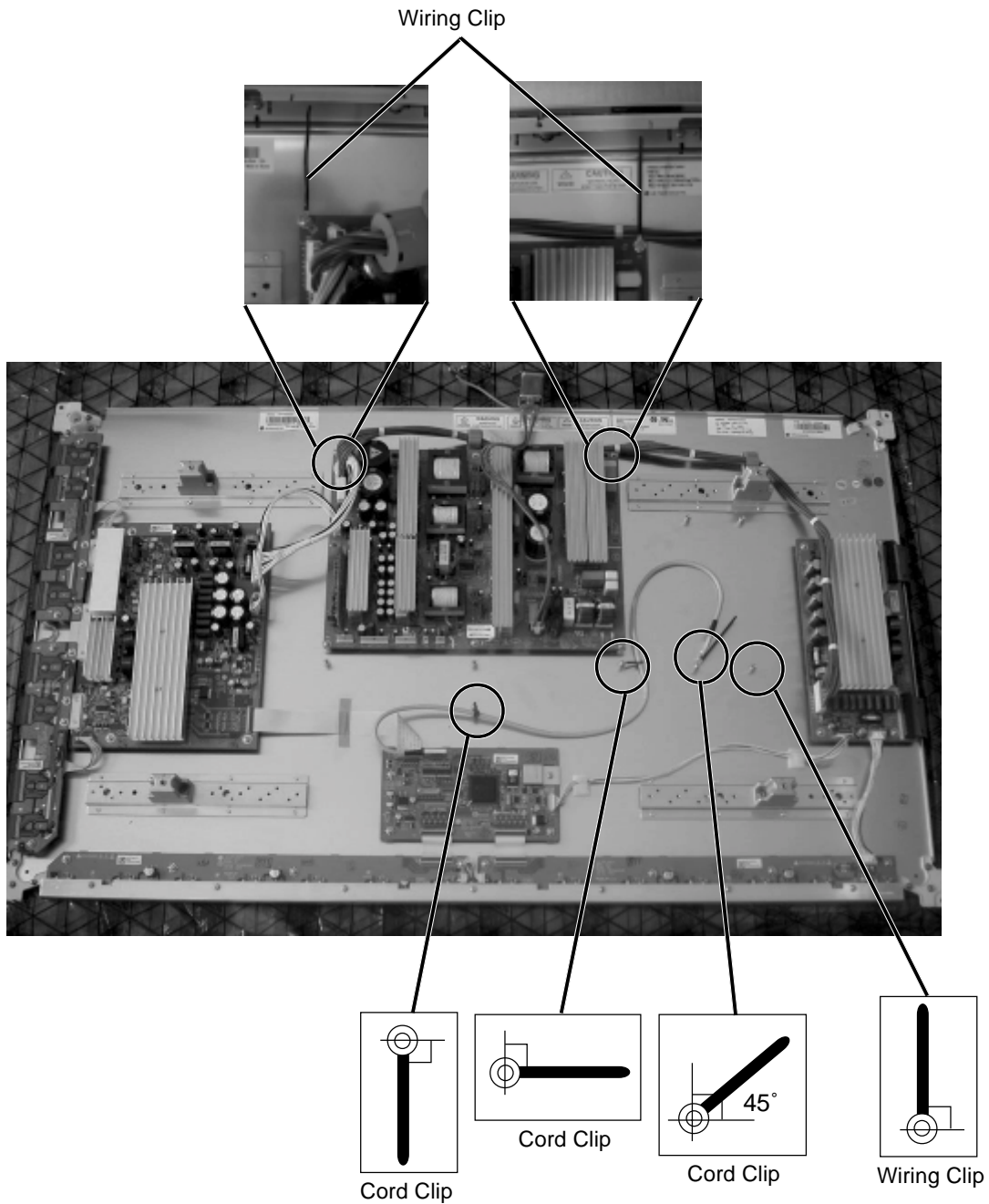
Vacuum Exhaust Pipe



# DISASSEMBLY INSTRUCTIONS

## 1-6: PDP MODULE (PREPARATION)

1. Remove the fixing screw of Power PCB. Then fix the Wiring Clip. (Use the clipson defective PDP Module)
2. Fix the Cord Clip. (Use the clip son defective PDP Module)
3. Fix the Wiring Clip. (Use the clip son defective PDP Module)

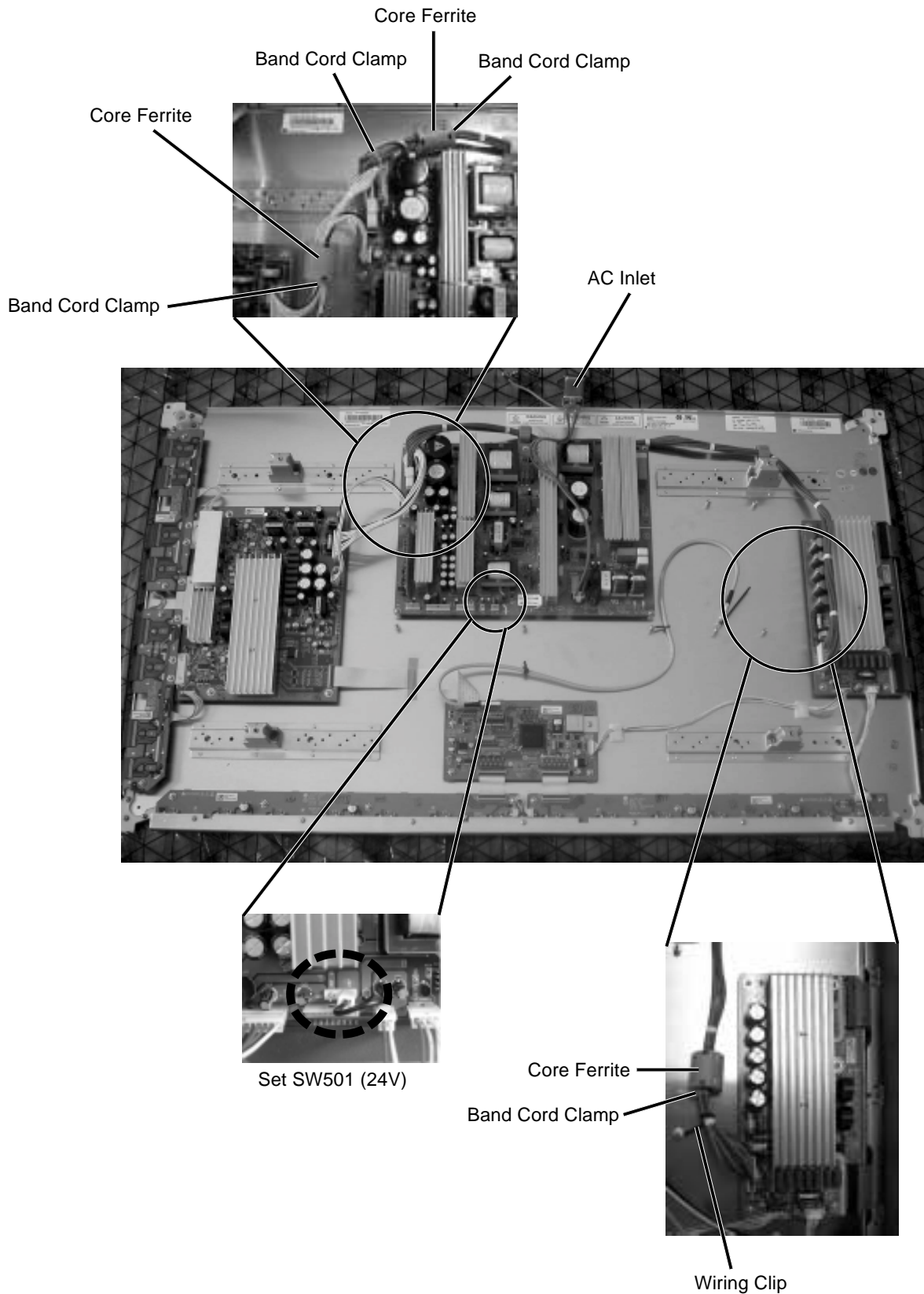




## DISASSEMBLY INSTRUCTIONS

### 1-7: PDP MODULE (WIRING)

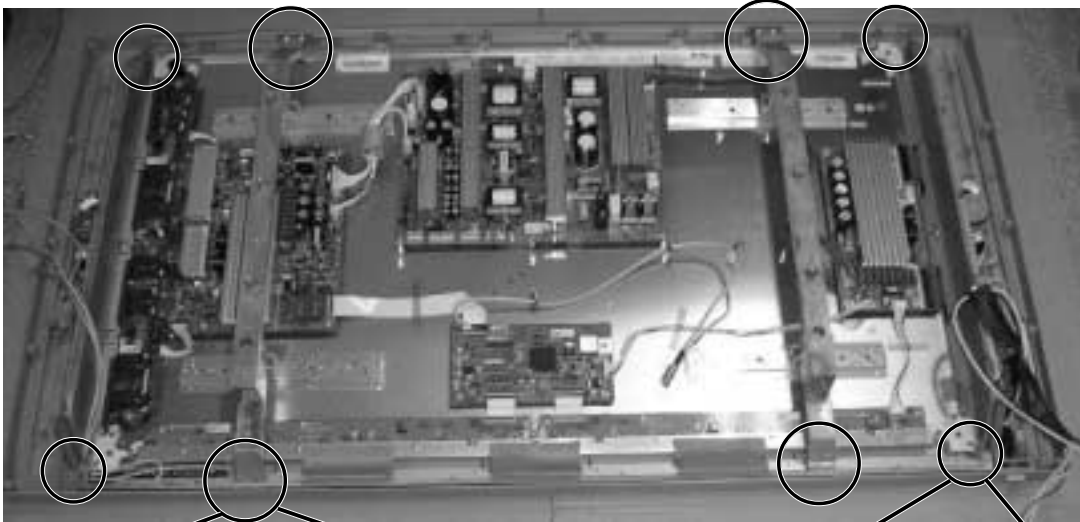
1. Fix the wiring with the Band Cord Clamp.
2. Fix the Core Ferrite. (Use the clip son defective PDP Module)
3. Remove the AC Inlet.



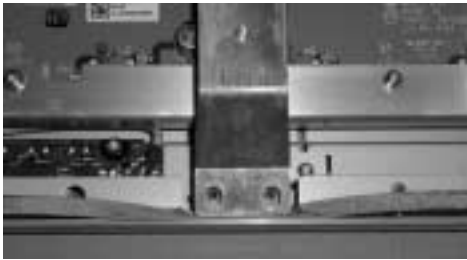
## DISASSEMBLY INSTRUCTIONS

### 1-8: PDP MODULE

1. Fix the Frame Main. (Use the clip son defective PDP Module)
2. Install the PDP Filter on the set.
3. Install the Shield Main on the set.
4. Hold the Frame Main carefully and install the New PDP Module on the set.

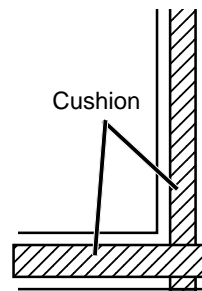


[NG]



No mesh of the cushion (For all 4 positions)

[4 ends common]

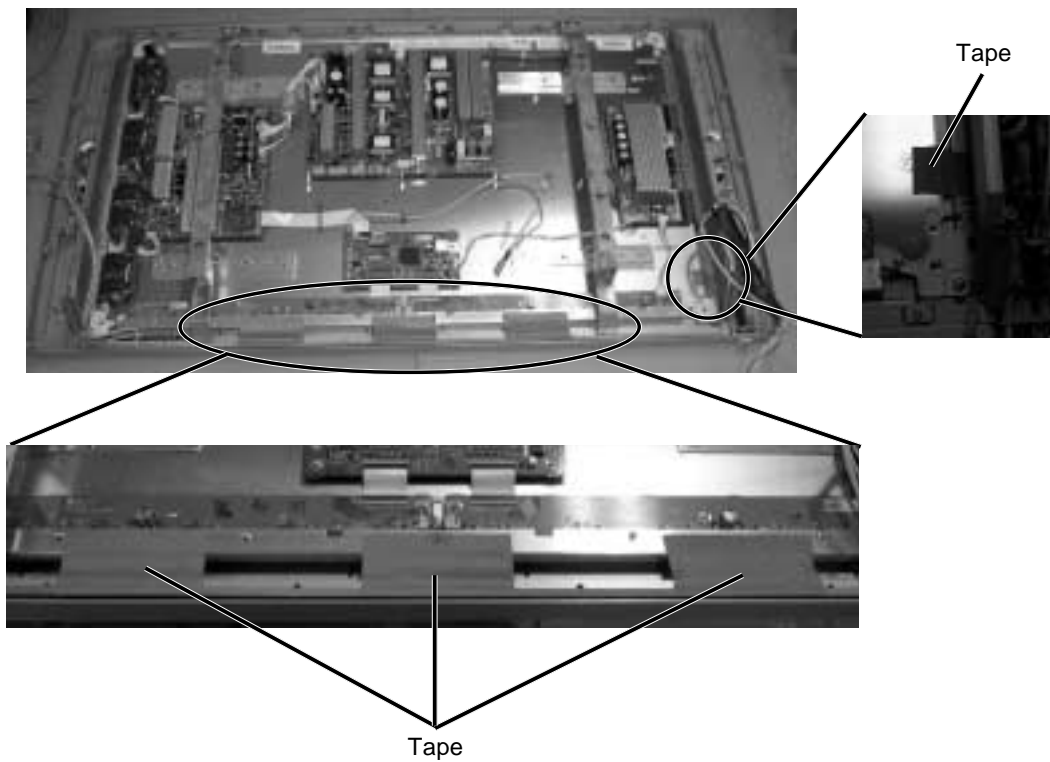
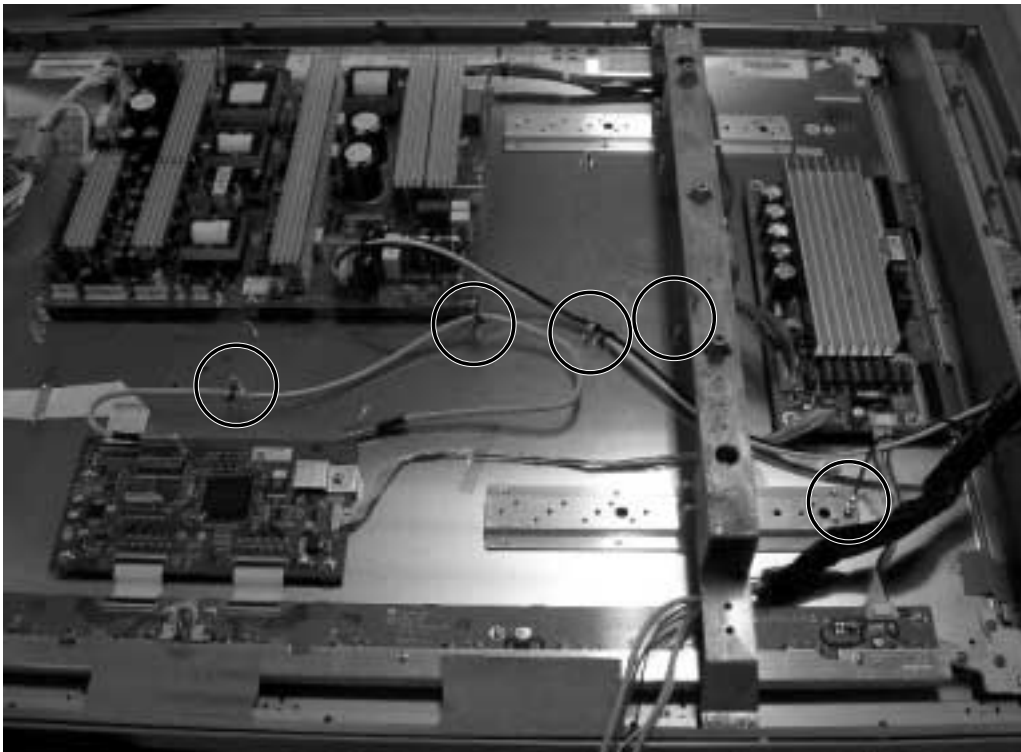


Pile up the cushion.

## DISASSEMBLY INSTRUCTIONS

### 1-9: WIRE FIXING/TAPE

1. Do the wire fixing as shown the photo.
2. Stick the tapes on the position as shown the photo. (Order the tape newly.)

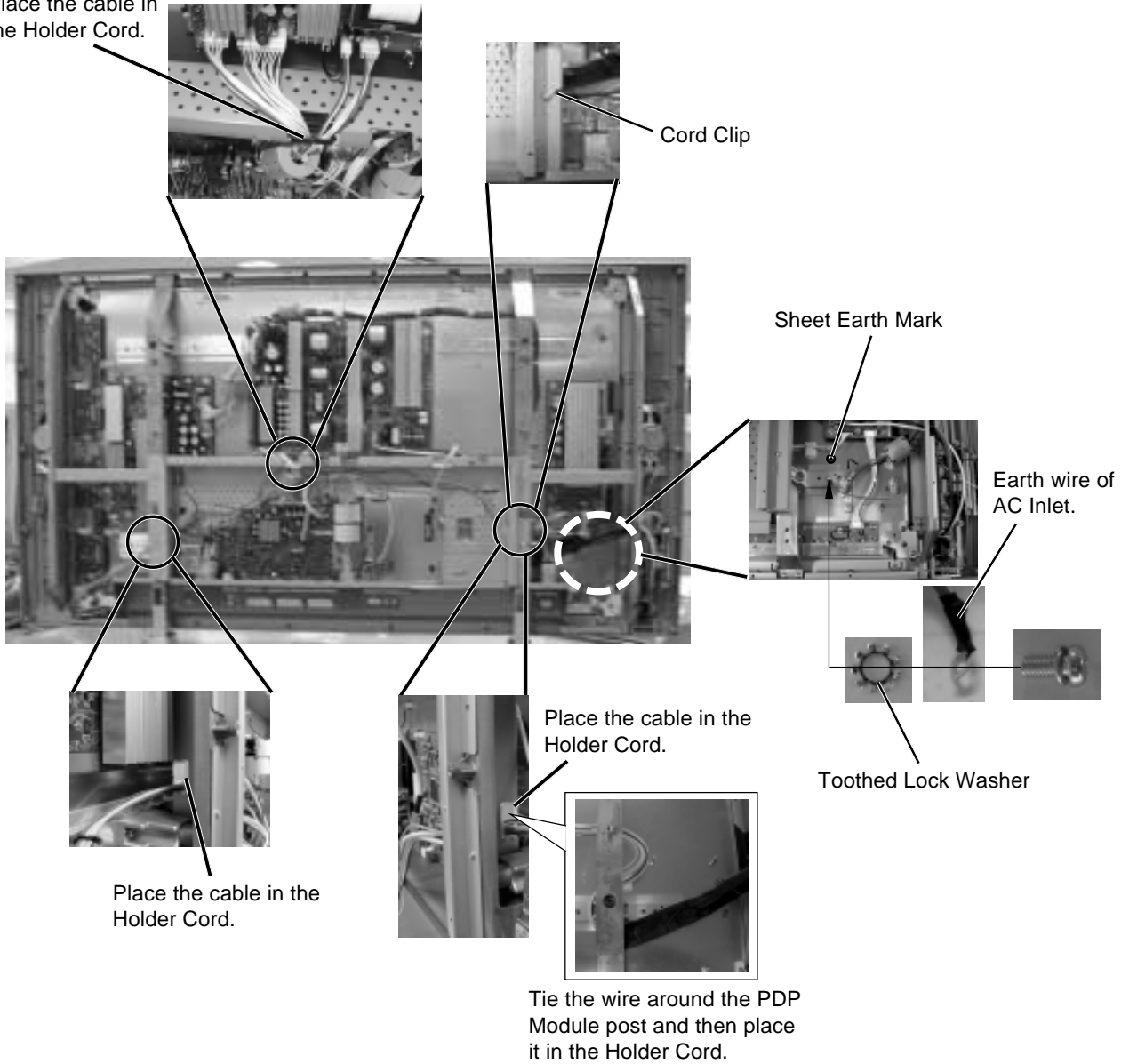


# DISASSEMBLY INSTRUCTIONS

## 1-10: CHASSIS BLOCK

1. Do the wire fixing as shown the photo, then install the Chassis Ass'y.
2. Install the Stand Ass'y.

Place the cable in the Holder Cord.



## 1-12: CABINET BACK/COVER BACK

1. Check if the wire handlings are correct.
2. Check if the cushion pastings are correct.
3. Check if the tape pastings are correct.
4. Install the Cabinet Back and Cover Back.

## DISASSEMBLY INSTRUCTIONS

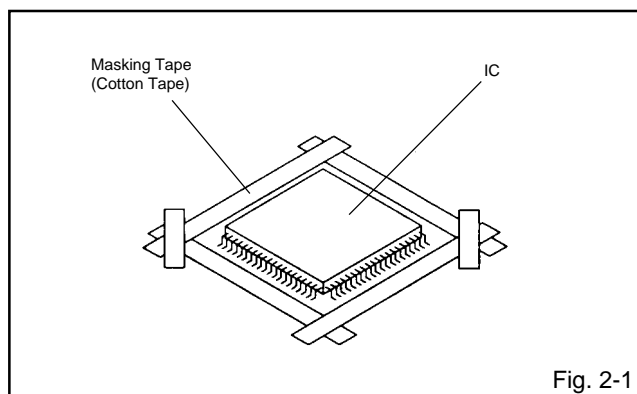
### 2. REMOVAL AND INSTALLATION OF FLAT PACKAGE IC

#### REMOVAL

1. Put Masking Tape (cotton tape) around the Flat Package IC to protect other parts from any damage. (Refer to Fig. 2-1.)

#### NOTE

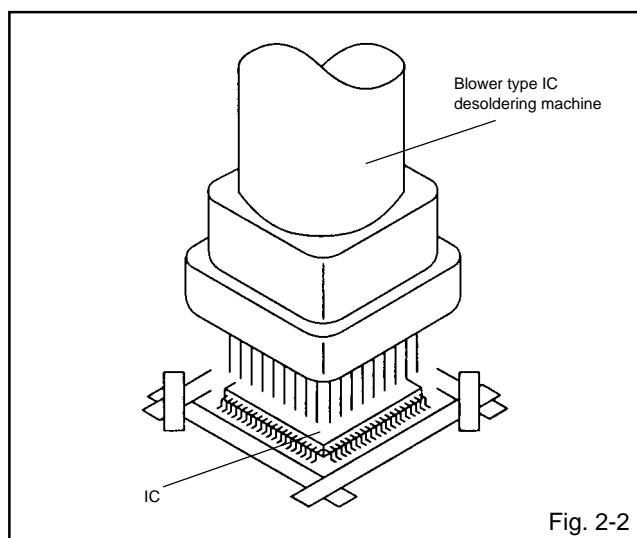
Masking is carried out on all the parts located within 10 mm distance from IC leads.



2. Heat the IC leads using a blower type IC desoldering machine. (Refer to Fig. 2-2.)

#### NOTE

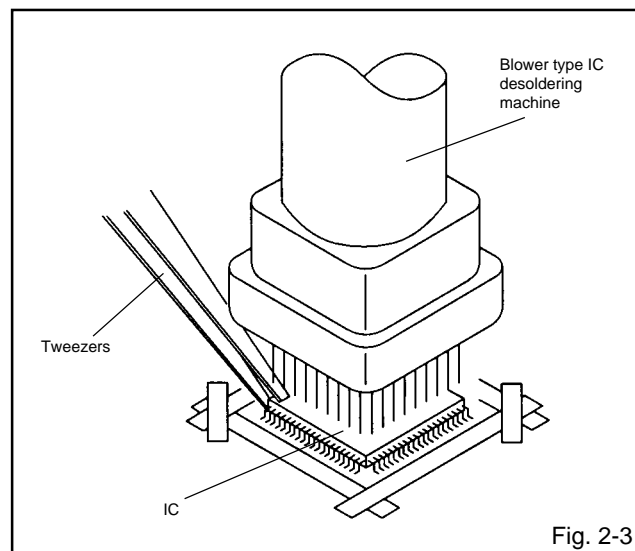
Do not rotate or move the IC back and forth, until IC can move back and forth easily after desoldering the leads completely.



3. When IC starts moving back and forth easily after desoldering completely, pickup the corner of the IC using tweezers and remove the IC by moving with the IC desoldering machine. (Refer to Fig. 2-3.)

#### NOTE

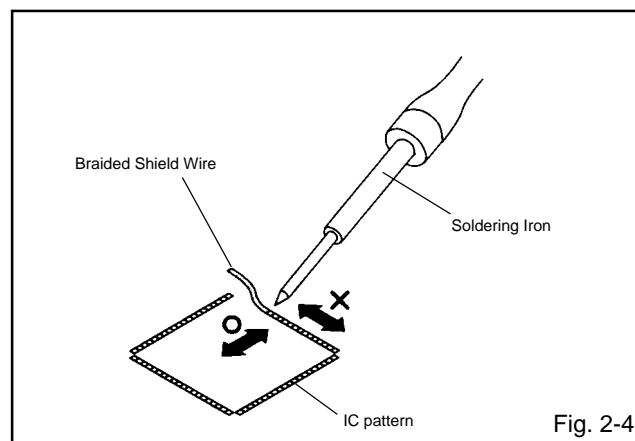
Some ICs on the PCB are affixed with glue, so be careful not to break or damage the foil of each IC leads or solder lands under the IC when removing it.



4. Peel off the Masking Tape.
5. Absorb the solder left on the pattern using the Braided Shield Wire. (Refer to Fig. 2-4.)

#### NOTE

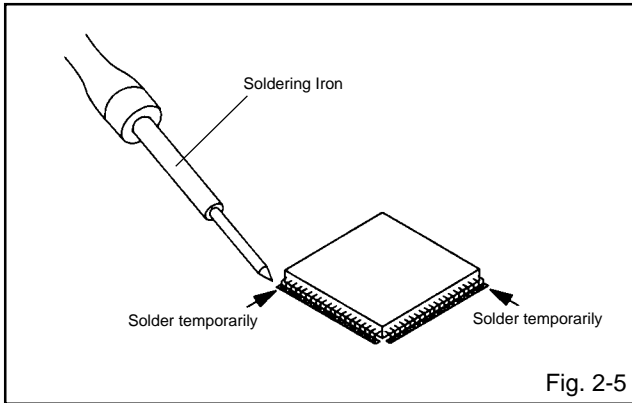
Do not move the Braided Shield Wire in the vertical direction towards the IC pattern.



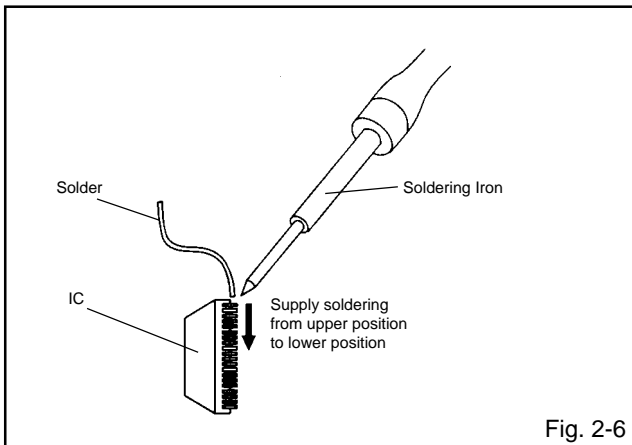
# DISASSEMBLY INSTRUCTIONS

## INSTALLATION

1. Take care of the polarity of new IC and then install the new IC fitting on the printed circuit pattern. Then solder each lead on the diagonal positions of IC temporarily. (Refer to Fig. 2-5.)



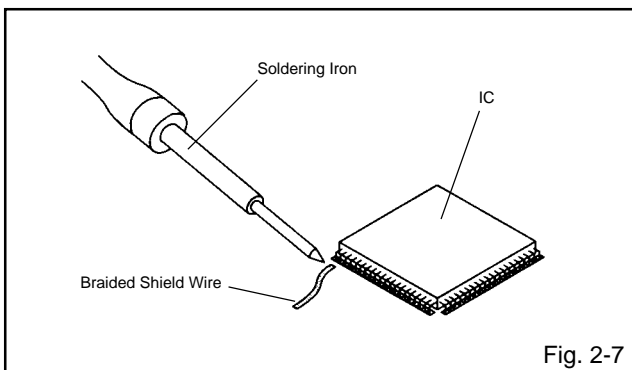
2. Supply the solder from the upper position of IC leads sliding to the lower position of the IC leads. (Refer to Fig. 2-6.)



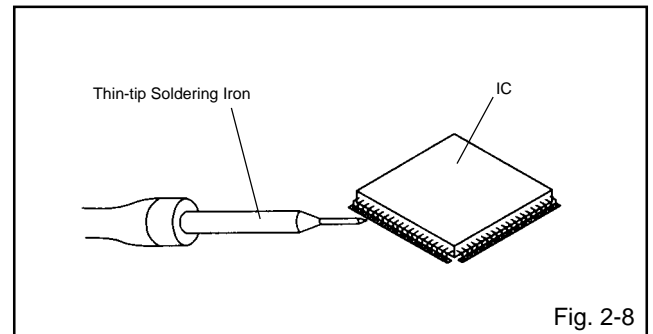
3. Absorb the solder left on the lead using the Braided Shield Wire. (Refer to Fig. 2-7.)

### NOTE

Do not absorb the solder to excess.



4. When bridge-soldering between terminals and/or the soldering amount are not enough, resolder using a Thin-tip Soldering Iron. (Refer to Fig. 2-8.)



5. Finally, confirm the soldering status on four sides of the IC using a magnifying glass. Confirm that no abnormality is found on the soldering position and installation position of the parts around the IC. If some abnormality is found, correct by resoldering.

### NOTE

When the IC leads are bent during soldering and/or repairing, do not repair the bending of leads. If the bending of leads are repaired, the pattern may be damaged. So, always be sure to replace the IC in this case.

## SERVICE MODE LIST

This unit is provided with the following SERVICE MODES so you can repair, examine and adjust easily.

To enter to the SERVICE MODE function, press and hold both buttons simultaneously on the main unit and on the remote control for more than the standard time in the appropriate condition. (See below chart.)

Set Condition	Set Key	Remocon Key	Standard Time	Operations
TV mode	VOL. DOWN (Minimum)	0	2 sec.	Reset the user setting items (PICTURE, VOLUME, LANGUAGE and NICAM AUTO/OFF) to the initial state for delivery.
TV mode	VOL. DOWN (Minimum)	1	2 sec.	Initialization of factory TV data. NOTE: If you set factory initialization, the memories are reset such as the channel setting, and the POWER ON total hours.
TV mode	VOL. DOWN (Minimum)	6	2 sec.	POWER ON total hours are displayed on the screen. Refer to the "PREVENTIVE CHECKS AND SERVICE INTERVALS" (CONFIRMATION OF HOURS USED).  Can be checked of the INITIAL DATA of MEMORY IC. Refer to the "WHEN REPLACING EEPROM (MEMORY) IC".
ALL mode	VOL. DOWN (Minimum)	9	2 sec.	Display of the Adjustment MENU on the screen. Refer to the "ELECTRICAL ADJUSTMENT" (On-Screen Display Adjustment).

## CONFIRMATION OF HOURS USED

POWER ON total hours can be checked on the screen. Total hours are displayed in 16 system of notation.

**NOTE: If you set a factory initialization, the total hours is reset to "0".**

1. Turn on the POWER, and set to the TV mode.
2. Set the VOLUME to minimum.
3. Press both VOL. DOWN button on the set and Channel button **(6)** on the remote control for more than 2 seconds.
4. After the confirmation of using hours, turn off the power.

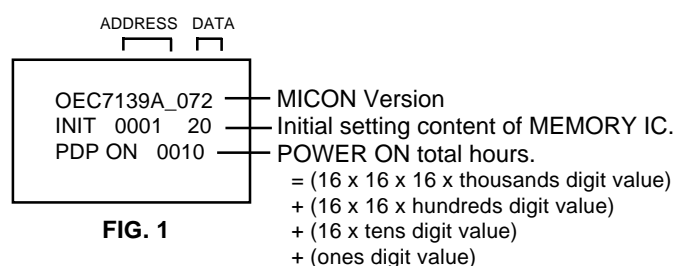


FIG. 1

## WHEN REPLACING EEPROM (MEMORY) IC

If a service repair is undertaken where it has been required to change the MEMORY IC, the following steps should be taken to ensure correct data settings while making reference to TABLE 1.

1. Turn on the POWER, and set to the TV mode.
2. Set the VOLUME to minimum.
3. Press both VOL. DOWN button on the set and Channel button **(6)** on the remote control for more than 2 seconds.  
ADDRESS and DATA should appear as FIG 1.

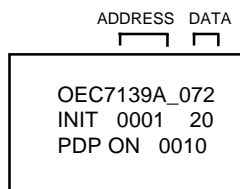


FIG. 1

4. ADDRESS is now selected and should "blink". Using the RIGHT/LEFT button on the remote, step through the ADDRESS until required ADDRESS to be changed is reached.
  5. Press ENTER to select DATA. When DATA is selected, it will "blink".
  6. Again, step through the DATA using RIGHT/LEFT button until required DATA value has been selected.
  7. Pressing ENTER will take you back to ADDRESS for further selection if necessary.
  8. Repeat steps 4 to 7 until all data has been checked.
  9. When satisfied correct DATA has been entered, turn POWER off (return to STANDBY MODE) to finish DATA input.  
**After the data input, set to the initializing of shipping.**
  10. Turn on the POWER, and set to the TV mode.
  11. Press both VOL. DOWN button on the set and Channel button **(1)** on the remote control for more than 2 seconds.
  12. After the finishing of the initializing of shipping, the unit will turn off automatically.
- The unit will now have the correct DATA for the new MEMORY IC.

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
0000		20	00	E4	79	7C	02	C0	08	9E	FE	F3	F3	90	80	31
0010	00	20	00	00	AA	30	30	10	01	00	0E	48	05	03	4F	88
0020	70	20	40	20	1E	70	4D	05	0B	35	00	04	F0	F0	E8	F0
0030	FA	27	33	00	00	10	30	3B	F8	08	16	41	4B	98	00	18
0040	00	00	76	EA	DB	DB	FA	00	47	00	00	15	10	00	10	0D
0050	05	70	33	03	1F	24	F8	EF	DB	DB	DB	03	00	00	22	00
0060	00	22	00	00	20	00	01	FE	8B	93	82	8A	FE	FF	37	44
0070	45	4F	51	53	59	5E	5F	61	62	64	66	67	68	69	6A	6B
0080	6C	6D	6E	6E	6F	6F	70	70	71	71	72	72	73	73	74	74
0090	75	75	76	76	77	77	78	78	79	79	7A	7A	7B	7B	7C	7C
00A0	37	44	45	4F	51	53	59	5E	5F	61	62	64	66	67	68	69
00B0	6A	6B	6C	6D	6E	6E	6F	6F	70	70	71	71	72	72	73	73
00C0	74	74	75	75	76	76	77	77	78	78	79	79	7A	7A	7B	7B
00D0	7C	7C	DB	DB	A1	DB	EA	0F	08	00	01	00	2C	13	74	6B
00E0	A6	D4	C1	3C	F6	8C	84	84	00	82	00	85	00	00	73	25
00F0	CE	F0	05	F0	05	07	A4	07	25	09	2A	09	68	F8	14	06

Table 1-1



## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
0600	31	F0	28	1F	08	08	20	80	80	80	7F	7F	7F	F2	6E	80
0610	20	04	04	02	00	00	00	00	01	00	00	00	00	00	00	00
0620	38	30	20	FF	10	08	60	80	80	80	7F	7F	7F	F6	6E	B8
0630	00	04	04	02	00	00	00	00	01	00	00	00	00	00	00	00
0640	41	F0	60	1F	08	08	20	80	80	80	7F	7F	7F	F2	6E	80
0650	20	04	04	02	00	00	00	00	01	00	00	00	00	00	00	00
0660	53	F0	70	8F	08	08	20	80	80	80	7F	7F	7F	F2	6E	80
0670	20	04	04	02	00	00	00	00	01	00	00	00	00	00	00	00
0680	67	F0	A0	6F	10	08	60	80	80	80	7F	7F	7F	F2	6E	B8
0690	28	04	04	02	00	00	00	00	01	00	00	00	00	00	00	00
06A0	67	F0	A0	F3	10	08	60	80	80	80	7F	7F	7F	F2	6E	B8
06B0	28	04	04	02	00	00	00	00	01	00	00	00	00	00	00	00
06C0	6B	30	18	F0	07	14	44	80	D0	80	80	7A	7F	6F	66	B5
06D0	30	0B	0F	02	00	00	00	00	01	00	00	00	00	00	00	00
06E0	35	90	18	70	07	14	35	80	D0	80	80	7A	80	6F	66	B5
06F0	30	0B	0F	02	00	00	00	00	01	00	00	00	00	00	00	00
0700	67	10	88	B0	30	14	C0	80	D0	80	80	7A	80	6F	66	B5
0710	20	0B	0F	02	00	00	00	00	01	00	00	00	00	00	00	00
0720	89	70	A8	B0	30	05	94	80	D0	80	7F	7A	7E	6B	66	B5
0730	30	0B	0F	02	00	00	00	00	01	00	00	00	00	00	00	00
0740	42	F0	30	E5	08	08	20	80	80	80	7F	7F	7F	F2	6E	80
0750	20	04	0F	02	00	00	00	00	01	00	00	00	00	00	00	00
0760	6B	F0	18	70	07	14	44	80	D0	80	80	7A	80	6F	66	B5
0770	30	0B	0F	02	00	00	00	01	00	00	00	00	00	00	00	00
0780	35	F0	18	70	07	14	35	80	D0	80	80	7A	80	6F	66	B5
0790	30	0B	0F	02	00	00	00	01	00	00	00	00	00	00	00	00
07A0	7B	B0	A8	B0	2B	05	B0	80	D0	80	7F	7A	7E	6F	66	B5
07B0	20	0B	0F	02	00	00	00	01	00	00	00	00	00	00	00	00
07C0	A4	F0	A8	B0	30	05	94	80	D0	80	7F	7A	7D	6B	66	B5
07D0	30	0B	0F	02	00	00	00	01	00	00	00	00	00	00	00	00
07E0~ 07F0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF

Table 1-2

## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
1000	3F	02	18	FF	4C	33	65	6D	CA	52	18	F7	4C	33	4C	29
1010	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
1020	7F	12	18	6B	83	7F	F9	5E	7F	12	18	6B	83	7F	F9	5E
1030	7F	12	18	6B	83	7F	F9	5E	7F	12	18	6B	83	7F	F9	5E
1040~ 10B0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
10C0	01	00	02	00	00	00	04	00	05	00	00	00	00	00	00	00
10D0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
10E0	20	00	04	00	02	00	04	00	20	3C	02	00	3C	00	50	00
10F0	B4	00	C8	00	2E	00	54	03	98	01	30	02	19	40	0A	11
1100	04	01	00	00	04	00	00	00	04	02	C8	3C	37	00	04	00
1110	B4	20	00	00	04	00	00	00	04	00	32	06	80	00	00	00
1120	50	00	F0	C8	00	00	60	00	80	00	54	00	39	00	86	01
1130	20	00	04	00	02	00	04	00	20	3C	02	00	3C	00	50	00
1140	B4	00	C8	00	2E	00	54	03	98	01	30	02	19	40	0A	11
1150	04	01	00	00	04	00	00	00	04	02	C8	3C	37	00	04	00
1160	96	20	00	00	04	00	00	00	04	00	32	06	80	00	00	00
1170	50	00	F0	B4	00	00	30	00	40	00	54	00	39	00	86	01
1180	20	00	04	00	02	00	04	00	20	3C	02	00	3C	00	50	00
1190	B4	00	C8	00	2E	00	54	03	54	01	30	02	19	40	0A	11
11A0	04	01	00	00	04	00	00	00	04	02	C8	3C	37	00	04	00
11B0	96	20	00	00	04	00	00	00	04	00	32	06	80	00	00	00
11C0	50	00	F0	B4	00	00	30	00	40	00	3F	00	39	00	86	01
11D0	20	00	04	00	02	00	04	00	20	3C	02	00	3C	00	50	00
11E0	B4	00	C8	00	2E	00	54	03	98	01	30	02	19	40	0A	11
11F0	04	01	00	00	04	00	00	00	04	02	C8	3C	37	00	04	00
1200	96	20	00	00	04	00	00	00	04	00	32	06	80	00	00	00
1210	50	00	F0	B4	00	00	30	00	40	00	54	00	39	00	86	01
1220	20	00	04	00	02	00	04	00	20	3C	02	00	3C	00	50	00
1230	B4	00	C8	00	2E	00	54	03	98	01	30	02	19	40	0A	11
1240	04	01	00	00	04	00	00	00	04	02	C8	3C	37	00	04	00
1250	96	20	00	00	04	00	00	00	04	00	32	06	80	00	00	00
1260	50	00	F0	B4	00	00	30	00	40	00	54	00	39	00	86	01
1270	20	00	04	00	02	00	04	00	20	3C	02	00	3C	00	50	00
1280	B4	00	C8	00	2E	00	54	03	54	01	30	02	19	40	0A	11
1290	04	01	00	00	04	00	00	00	04	02	C8	3C	37	00	04	00

Table 1-3

## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
12A0	96	20	00	00	04	00	00	00	04	00	32	06	80	00	00	00
12B0	50	00	F0	B4	00	00	30	00	40	00	3F	00	39	00	86	01
12C0	16	00	02	00	02	00	00	02	0A	11	00	01	00	00	2A	00
12D0	59	00	59	00	2E	00	54	03	98	01	30	02	18	30	0A	11
12E0	01	01	41	0E	02	00	00	05	04	04	41	0E	1C	00	02	0B
12F0	41	05	00	00	02	00	00	00	02	00	32	06	80	00	00	00
1300	41	00	41	41	00	00	3C	00	6E	00	54	00	39	00	86	01
1310	16	00	02	00	02	00	00	02	0A	11	00	01	00	00	2A	00
1320	59	00	59	00	2E	00	54	03	98	01	30	02	18	30	0A	11
1330	01	01	41	0E	02	00	00	05	04	04	41	0E	1C	00	02	0B
1340	41	05	00	00	02	00	00	00	02	00	32	06	80	00	00	00
1350	41	00	41	41	00	00	3C	00	6E	00	54	00	39	00	86	01
1360	2C	00	02	00	02	00	00	02	16	16	00	01	46	00	46	00
1370	46	00	46	00	2E	00	54	03	54	01	30	02	18	30	0A	11
1380	01	01	41	0E	02	00	00	05	04	04	41	0E	1C	00	02	0B
1390	41	05	00	00	02	00	00	00	02	00	32	06	80	00	00	00
13A0	41	00	41	41	00	00	3C	00	6E	00	3F	00	39	00	86	01
13B0	20	00	04	00	02	00	04	00	20	3C	02	00	3C	00	50	00
13C0	B4	00	C8	00	2E	00	54	03	98	01	30	02	19	40	0A	11
13D0	04	01	00	00	04	00	00	00	04	02	C8	3C	37	00	04	00
13E0	96	20	00	00	04	00	00	00	04	00	32	06	80	00	00	00
13F0	50	00	F0	B4	00	00	30	00	40	00	54	00	39	00	86	01
1400	20	00	04	00	02	00	04	00	20	3C	02	00	3C	00	50	00
1410	B4	00	C8	00	2E	00	54	03	98	01	30	02	19	40	0A	11
1420	04	01	00	00	04	00	00	00	04	02	C8	3C	37	00	04	00
1430	96	20	00	00	04	00	00	00	04	00	32	06	80	00	00	00
1440	50	00	F0	B4	00	00	30	00	40	00	54	00	39	00	86	01
1450	20	00	04	00	02	00	04	00	20	3C	02	00	3C	00	50	00
1460	B4	00	C8	00	2E	00	54	03	54	01	30	02	19	40	0A	11
1470	04	01	00	00	04	00	00	00	04	02	C8	3C	37	00	04	00
1480	96	20	00	00	04	00	00	00	04	00	32	06	80	00	00	00
1490	50	00	F0	B4	00	00	30	00	40	00	3F	00	39	00	86	01

Table 1-4

## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
14A0	20	00	04	00	02	00	04	00	20	3C	02	00	3C	00	50	00
14B0	B4	00	C8	00	2E	00	54	03	7C	01	30	02	19	40	0A	11
14C0	04	01	00	00	04	00	00	00	04	02	C8	3C	37	00	04	00
14D0	96	20	00	00	04	00	00	00	04	00	35	06	80	00	00	00
14E0	50	00	F0	B4	00	00	30	00	40	00	78	00	32	00	86	01
14F0	20	00	04	04	02	00	04	00	20	3C	04	04	3C	00	50	00
1500	B4	00	C8	00	2E	00	54	03	98	01	30	02	19	40	0A	11
1510	04	01	00	00	04	00	00	00	04	02	C8	3C	37	00	04	00
1520	96	20	00	00	04	00	00	00	04	00	36	06	80	00	00	00
1530	50	00	F0	B4	00	00	30	00	40	00	73	00	32	00	86	01
1540	20	00	00	00	02	00	04	00	20	3C	00	00	3C	00	50	00
1550	B4	00	C8	00	2E	00	54	03	E6	01	DC	03	19	40	0A	11
1560	04	01	00	00	04	00	00	00	00	00	C8	3C	37	00	00	00
1570	96	20	00	00	04	00	00	00	04	00	37	06	80	00	00	00
1580	50	00	F0	B4	00	00	30	00	40	00	80	00	64	00	86	01
1590	20	00	00	00	02	00	04	00	20	3C	00	00	3C	00	50	00
15A0	B4	00	C8	00	2E	00	54	03	74	01	16	06	19	40	0A	11
15B0	04	01	00	00	04	00	00	00	00	00	C8	3C	37	00	00	00
15C0	96	20	00	00	04	00	00	00	04	00	38	06	80	00	00	00
15D0	50	00	F0	B4	00	00	30	00	40	00	57	00	6E	00	86	01
15E0	20	00	04	00	02	00	04	00	20	3C	02	00	3C	00	50	00
15F0	B4	00	C8	00	2E	00	54	03	54	01	2A	02	19	40	0A	11
1600	04	01	00	00	04	00	00	00	04	02	C8	3C	37	00	04	00
1610	96	20	00	00	04	00	00	00	04	00	36	06	80	00	00	00
1620	50	00	F0	B4	00	00	30	00	40	00	50	00	3C	00	86	01
1630	20	00	04	00	02	00	04	00	20	3C	02	00	3C	00	50	00
1640	B4	00	C8	00	2E	00	54	03	2E	01	12	02	19	40	0A	11
1650	04	01	00	00	04	00	00	00	04	02	C8	3C	37	00	04	00
1660	96	20	00	00	04	00	00	00	04	00	36	06	80	00	00	00
1670	50	00	F0	B4	00	00	30	00	40	00	6A	00	46	00	86	01
1680	20	00	00	00	02	00	04	00	20	3C	00	00	3C	00	50	00
1690	B4	00	C8	00	2E	00	54	03	F2	01	12	04	19	40	0A	11

Table 1-5

## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
16A0	04	01	00	00	04	00	00	00	00	00	C8	3C	37	00	00	00
16B0	96	20	00	00	04	00	00	00	04	00	37	06	80	00	00	00
16C0	50	00	F0	B4	00	00	30	00	40	00	7C	00	4A	00	86	01
16D0	20	00	00	00	02	00	04	00	20	3C	00	00	3C	00	50	00
16E0	B4	00	C8	00	2E	00	54	03	62	01	FE	05	19	40	0A	11
16F0	04	01	00	00	04	00	00	00	00	00	C8	3C	37	00	00	00
1700	96	20	00	00	04	00	00	00	04	00	38	06	80	00	00	00
1710	50	00	F0	B4	00	00	30	00	40	00	60	00	7E	00	86	01
1720	EC	81	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
1730	80	00	54	03	6A	0C	2B	0B	65	0B	8F	0B	F8	0B	42	0C
1740	35	0D	42	0E	42	0E	34	05	32	00	54	03	E0	01	32	00
1750	54	03	E2	01	18	04	73	02	01	00	1E	12	0D	00	1E	C0
1760	54	00	00	80	00	10	76	00	9E	02	3C	05	0A	00	61	AB
1770	04	D2	2C	55	38	05	12	00	A2	00	2C	01	00	98	10	04
1780	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
1790	EC	81	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
17A0	80	00	80	02	00	10	2B	0B	65	0B	8F	0B	F8	0B	42	0C
17B0	35	0D	42	0E	42	0E	34	05	9C	00	54	03	E0	01	32	00
17C0	54	03	E2	01	18	04	73	02	01	00	1E	12	0D	00	1E	C0
17D0	54	00	00	80	7A	0F	76	00	9E	02	3C	05	0A	00	61	AB
17E0	04	D2	2C	55	38	05	12	00	A2	00	2C	01	00	98	10	04
17F0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
1800	EC	81	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
1810	80	00	EA	02	4E	0E	2B	0B	65	0B	8F	0B	F8	0B	42	0C
1820	35	0D	42	0E	42	0E	34	05	67	00	54	03	E0	01	32	00
1830	54	03	E2	01	18	04	73	02	01	00	1E	12	0D	00	1E	C0
1840	54	00	00	80	00	10	76	00	9E	02	3C	05	0A	00	61	AB
1850	04	D2	2C	55	38	05	12	00	A2	00	2C	01	00	98	10	04
1860	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
1870	EC	81	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
1880	80	80	54	03	87	0C	0D	0B	47	0B	71	0B	DA	0B	24	0C
1890	35	0D	42	0E	42	0E	34	05	32	00	54	03	E0	01	32	00

Table 1-6

## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
18A0	54	03	E2	01	18	04	73	02	01	00	1E	12	0D	00	1E	C0
18B0	54	00	00	80	00	10	76	00	9E	02	3C	05	0A	00	61	AB
18C0	04	D2	2C	55	38	05	14	00	A2	00	2C	01	00	98	10	04
18D0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
18E0	EC	81	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
18F0	80	00	54	03	6A	0C	2B	0B	65	0B	8F	0B	F8	0B	42	0C
1900	35	0D	42	0E	42	0E	55	04	32	00	54	03	E0	01	32	00
1910	54	03	E2	01	18	04	73	02	01	00	92	0D	0D	00	1E	C0
1920	54	00	00	80	00	10	76	00	9E	02	3C	05	14	00	A1	EC
1930	04	D2	22	51	38	05	62	00	D1	00	22	01	00	98	10	04
1940	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
1950	EC	01	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
1960	80	00	54	03	82	0C	2B	0B	65	0B	8F	0B	F8	0B	42	0C
1970	35	0D	42	0E	42	0E	34	05	32	00	54	03	E0	01	32	00
1980	54	03	E2	01	18	04	73	02	01	00	1E	12	0D	00	1E	C0
1990	54	00	00	80	00	10	52	00	00	05	9E	02	0A	00	61	AB
19A0	04	D2	2C	55	48	05	12	00	2A	00	62	02	00	98	10	04
19B0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
19C0	EC	01	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
19D0	80	00	80	02	00	10	2B	0B	65	0B	8F	0B	F8	0B	42	0C
19E0	35	0D	42	0E	42	0E	34	05	9C	00	54	03	E0	01	32	00
19F0	54	03	E2	01	18	04	73	02	01	00	1E	12	0D	00	1E	C0
1A00	54	00	00	80	77	0F	52	00	00	05	9E	02	0A	00	61	AB
1A10	04	D2	2C	55	48	05	12	00	2A	00	62	02	00	98	10	04
1A20	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
1A30	EC	01	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
1A40	80	00	EA	02	38	0E	2B	0B	65	0B	8F	0B	F8	0B	42	0C
1A50	35	0D	42	0E	42	0E	34	05	67	00	54	03	E0	01	32	00
1A60	54	03	E2	01	18	04	73	02	01	00	1E	12	0D	00	1E	C0
1A70	54	00	00	80	00	10	52	00	00	05	9E	02	0A	00	61	AB
1A80	04	D2	2C	55	48	05	12	00	2A	00	62	02	00	98	10	04
1A90	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00

Table 1-7

## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
1AA0	EC	01	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
1AB0	80	80	54	03	82	0C	2B	0B	65	0B	8F	0B	F8	0B	42	0C
1AC0	35	0D	42	0E	42	0E	34	05	32	00	54	03	E0	01	32	00
1AD0	54	03	E2	01	18	04	73	02	01	00	1E	12	0D	00	1E	C0
1AE0	54	00	00	80	00	10	52	00	00	05	9E	02	0A	00	61	AB
1AF0	04	D2	2C	55	48	05	14	00	2A	00	62	02	00	98	10	04
1B00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
1B10	EC	01	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
1B20	80	00	54	03	82	0C	2B	0B	65	0B	8F	0B	F8	0B	42	0C
1B30	35	0D	42	0E	42	0E	55	04	32	00	54	03	E0	01	32	00
1B40	54	03	E2	01	18	04	73	02	01	00	92	0D	0D	00	1E	C0
1B50	54	00	00	80	00	10	52	00	00	05	9E	02	22	00	A1	EC
1B60	04	D2	22	51	48	05	60	00	51	00	44	02	00	98	10	04
1B70	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
1B80	EC	01	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
1B90	80	00	54	03	00	10	2B	0B	65	0B	8F	0B	F8	0B	42	0C
1BA0	35	0D	42	0E	42	0E	C8	04	32	00	54	03	E0	01	32	00
1BB0	54	03	E2	01	40	04	0D	02	01	00	D2	16	0D	00	1E	C0
1BC0	54	00	00	80	7A	0B	52	00	CF	05	C4	04	0A	00	5F	A9
1BD0	04	D2	2C	55	48	05	E7	02	94	00	E4	02	00	A8	10	04
1BE0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
1BF0	EC	01	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
1C00	80	00	54	03	00	10	2B	0B	65	0B	8F	0B	F8	0B	42	0C
1C10	35	0D	42	0E	42	0E	C8	04	32	00	54	03	E0	01	32	00
1C20	54	03	E2	01	40	04	0D	02	01	00	26	11	0D	00	0A	C0
1C30	40	00	00	00	AD	07	AA	00	80	07	26	07	0A	00	5F	A9
1C40	04	D2	2C	55	48	05	30	02	94	00	60	02	00	A8	08	04
1C50	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
1C60	EC	81	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
1C70	80	00	54	03	A6	0C	52	0B	8C	0B	B6	0B	21	0C	6C	0C
1C80	63	0D	73	0E	73	0E	43	04	32	00	54	03	E0	01	32	00
1C90	54	03	E2	01	75	04	25	02	01	00	44	0F	0D	00	1E	C0

Table 1-8

## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
1CA0	54	00	00	80	00	10	76	00	A4	02	50	05	0A	00	21	AB
1CB0	04	D2	F0	54	48	05	12	00	91	00	FA	00	00	98	10	04
1CC0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
1CD0	EC	81	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
1CE0	80	00	80	02	00	10	52	0B	8C	0B	B6	0B	21	0C	6C	0C
1CF0	63	0D	73	0E	73	0E	43	04	9C	00	54	03	E0	01	32	00
1D00	54	03	E2	01	75	04	25	02	01	00	44	0F	0D	00	1E	C0
1D10	54	00	00	80	32	0F	76	00	A4	02	50	05	0A	00	21	AB
1D20	04	D2	F0	54	48	05	12	00	91	00	FA	00	00	98	10	04
1D30	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
1D40	EC	81	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
1D50	80	00	EA	02	A6	0E	52	0B	8C	0B	B6	0B	21	0C	6C	0C
1D60	63	0D	73	0E	73	0E	43	04	67	00	54	03	E0	01	32	00
1D70	54	03	E2	01	75	04	25	02	01	00	44	0F	0D	00	1E	C0
1D80	54	00	00	80	00	10	76	00	A4	02	50	05	0A	00	21	AB
1D90	04	D2	F0	54	48	05	12	00	91	00	FA	00	00	98	10	04
1DA0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
1DB0	EC	81	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
1DC0	80	80	54	03	AD	0C	3A	0B	80	0B	A8	0B	1E	0C	68	0C
1DD0	63	0D	73	0E	73	0E	5C	04	32	00	54	03	E0	01	32	00
1DE0	54	03	E2	01	75	04	25	02	01	00	4D	0F	0D	00	1E	C0
1DF0	54	00	00	80	00	10	76	00	A4	02	50	05	0A	00	61	AB
1E00	04	D2	F2	40	48	05	11	00	91	00	FA	00	00	98	10	04
1E10	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
1E20	EC	81	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
1E30	80	00	54	03	A6	0C	52	0B	8C	0B	B6	0B	21	0C	6C	0C
1E40	63	0D	73	0E	73	0E	39	04	32	00	A8	02	E0	01	32	00
1E50	54	03	E1	01	39	04	DC	02	01	00	6F	0B	0D	00	1E	C0
1E60	54	00	00	80	00	10	74	00	A8	02	48	05	10	00	5E	AD
1E70	04	D0	F2	40	48	05	52	00	7B	00	F2	00	00	98	10	04
1E80	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
1E90	EC	01	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00

Table 1-9



## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
1EA0	80	00	54	03	90	0C	52	0B	8C	0B	B6	0B	21	0C	6C	0C
1EB0	63	0D	73	0E	73	0E	43	04	32	00	54	03	E0	01	32	00
1EC0	54	03	E2	01	63	04	25	02	01	00	44	0F	0D	00	1E	C0
1ED0	54	00	00	80	00	10	52	00	EE	02	A8	02	14	00	21	AB
1EE0	04	D2	F0	54	48	05	11	00	91	00	F4	01	00	98	10	04
1EF0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
1F00	EC	01	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
1F10	80	00	80	02	00	10	52	0B	8C	0B	B6	0B	21	0C	6C	0C
1F20	63	0D	73	0E	73	0E	43	04	9C	00	54	03	E0	01	32	00
1F30	54	03	E2	01	63	04	25	02	01	00	44	0F	0D	00	1E	C0
1F40	54	00	00	80	4E	0F	52	00	EE	02	A8	02	14	00	21	AB
1F50	04	D2	F0	54	48	05	12	00	91	00	F4	01	00	98	10	04
1F60	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
1F70	EC	01	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
1F80	80	00	EA	02	56	0E	52	0B	8C	0B	B6	0B	21	0C	6C	0C
1F90	63	0D	73	0E	73	0E	43	04	67	00	54	03	E0	01	32	00
1FA0	54	03	E2	01	63	04	25	02	01	00	44	0F	0D	00	1E	C0
1FB0	54	00	00	80	00	10	52	00	EE	02	A8	02	14	00	21	AB
1FC0	04	D2	F0	54	48	05	12	00	91	00	F4	01	00	98	10	04
1FD0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
1FE0	EC	01	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
1FF0	80	80	54	03	90	0C	52	0B	8C	0B	B6	0B	21	0C	6C	0C
2000	63	0D	73	0E	73	0E	5C	04	32	00	54	03	E0	01	32	00
2010	54	03	E2	01	63	04	25	02	01	00	4D	0F	0D	00	1E	C0
2020	54	00	00	80	00	10	52	00	EE	02	A8	02	14	00	61	AB
2030	04	D2	F0	54	48	05	11	00	91	00	F4	01	00	98	10	04
2040	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2050	EC	01	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
2060	80	00	54	03	90	0C	52	0B	8C	0B	B6	0B	21	0C	6C	0C
2070	63	0D	73	0E	73	0E	3C	04	32	00	54	03	E0	01	32	00
2080	54	03	E2	01	63	04	25	02	01	00	6F	0B	0D	00	1E	C0
2090	54	00	00	80	00	10	52	00	EE	02	A8	02	22	00	5E	AD

Table 1-10

## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
20A0	04	D2	F2	40	48	05	54	00	2E	00	E8	01	00	98	10	04
20B0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
20C0	EC	01	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
20D0	80	00	54	03	00	10	52	0B	8C	0B	B6	0B	21	0C	6C	0C
20E0	63	0D	73	0E	73	0E	73	04	32	00	54	03	E0	01	32	00
20F0	54	03	E2	01	63	04	25	02	01	00	CC	16	0D	00	1E	C0
2100	54	00	00	80	6D	0B	52	00	CF	05	C4	04	0A	00	21	AB
2110	04	D2	F0	54	48	05	E4	02	23	00	D0	02	00	A8	10	04
2120	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2130	EC	01	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
2140	80	00	54	03	00	10	52	0B	8C	0B	B6	0B	21	0C	6C	0C
2150	A1	02	00	0E	73	0E	75	04	32	00	54	03	E0	01	32	00
2160	54	03	E2	01	63	04	25	02	01	00	1F	11	0D	00	1E	C0
2170	54	00	00	00	A2	07	D2	00	70	07	98	08	0A	00	21	AB
2180	04	D2	F0	54	48	05	2E	02	23	00	25	02	00	A8	08	04
2190	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
21A0	EC	81	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
21B0	80	00	54	03	05	0C	52	0B	8C	0B	B6	0B	21	0C	6C	0C
21C0	63	0D	73	0E	73	0E	10	04	32	00	80	02	E0	01	32	00
21D0	54	03	E1	01	18	04	73	02	01	00	00	10	0D	00	1E	C0
21E0	54	00	00	00	00	10	76	00	A4	02	80	02	0A	00	21	AA
21F0	04	D2	E8	50	48	05	0A	00	48	00	12	02	00	A8	00	00
2200	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2210	EC	81	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
2220	80	00	80	02	00	10	52	0B	8C	0B	B6	0B	21	0C	6C	0C
2230	63	0D	73	0E	73	0E	10	04	9C	00	80	02	E0	01	32	00
2240	54	03	E1	01	18	04	73	02	01	00	00	10	0D	00	1E	C0
2250	54	00	00	00	00	10	76	00	A4	02	80	02	0A	00	21	AA
2260	04	D2	E8	50	48	05	0A	00	48	00	12	02	00	A8	00	00
2270	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2280	EC	81	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
2290	80	00	54	03	06	0F	52	0B	8C	0B	B6	0B	21	0C	6C	0C

Table 1-11

## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
22A0	63	0D	73	0E	73	0E	37	04	32	00	20	03	E0	01	32	00
22B0	54	03	E1	01	18	04	73	02	01	00	00	14	0D	00	1E	C0
22C0	54	00	00	00	00	10	76	00	A4	02	20	03	01	00	21	AA
22D0	04	D2	2C	55	48	05	0A	00	A2	00	2C	01	00	A8	00	00
22E0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
22F0	EC	81	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
2300	80	00	80	02	00	10	52	0B	8C	0B	B6	0B	21	0C	6C	0C
2310	63	0D	73	0E	73	0E	37	04	9C	00	20	03	E0	01	32	00
2320	54	03	E1	01	18	04	73	02	01	00	00	14	0D	00	1E	C0
2330	54	00	00	00	CD	0C	76	00	A4	02	20	03	01	00	21	AA
2340	04	D2	E8	50	48	05	0A	00	48	00	12	02	00	A8	00	00
2350	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2360	EC	81	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
2370	80	00	5E	03	EC	0F	52	0B	8C	0B	B6	0B	21	0C	6C	0C
2380	63	0D	73	0E	73	0E	1D	04	32	00	54	03	E0	01	32	00
2390	54	03	E1	01	18	04	73	02	01	00	00	10	0D	00	1E	C0
23A0	54	00	00	00	00	10	76	00	A4	01	50	03	09	00	21	AA
23B0	04	D2	E8	50	48	05	0A	00	C8	00	12	02	00	98	00	00
23C0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
23D0	EC	81	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
23E0	80	00	80	02	00	10	52	0B	8C	0B	B6	0B	21	0C	6C	0C
23F0	63	0D	73	0E	73	0E	39	04	9C	00	54	03	E0	01	32	00
2400	54	03	E1	01	38	04	73	02	01	00	99	19	0D	00	1E	C0
2410	54	00	00	00	00	0A	76	00	A4	02	00	04	09	00	21	AA
2420	04	D2	E8	50	48	05	0A	00	C9	00	32	03	00	A8	00	00
2430	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2440	EC	81	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
2450	80	00	54	03	06	0F	52	0B	8C	0B	B6	0B	21	0C	6C	0C
2460	63	0D	73	0E	73	0E	37	04	32	00	20	03	E0	01	32	00
2470	54	03	E1	01	18	04	73	02	01	00	00	14	0D	00	1E	C0
2480	54	00	00	00	00	10	76	00	A4	02	20	03	01	00	21	AA
2490	04	D2	E8	50	48	05	0A	00	F7	00	8A	02	00	A8	00	00

Table 1-12

## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
24A0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
24B0	EC	81	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
24C0	80	00	80	02	00	10	52	0B	8C	0B	B6	0B	21	0C	6C	0C
24D0	63	0D	73	0E	73	0E	37	04	9C	00	20	03	E0	01	32	00
24E0	54	03	E1	01	18	04	73	02	01	00	00	14	0D	00	1E	C0
24F0	54	00	00	00	CD	0C	76	00	A4	02	20	03	01	00	21	AA
2500	04	D2	E8	50	48	05	0A	00	F7	00	8A	02	00	A8	00	00
2510	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2520	EC	81	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
2530	80	00	54	03	00	10	52	0B	8C	0B	B6	0B	21	0C	6C	0C
2540	63	0D	73	0E	73	0E	39	04	32	00	54	03	E0	01	32	00
2550	54	03	E1	01	18	04	73	02	01	00	99	19	0D	00	1E	C0
2560	54	00	00	00	50	0D	76	00	A4	02	00	04	09	00	21	AA
2570	04	D2	E8	50	48	05	0A	00	C9	00	32	03	00	A8	00	00
2580	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2590	EC	81	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
25A0	80	00	80	02	00	10	52	0B	8C	0B	B6	0B	21	0C	6C	0C
25B0	63	0D	73	0E	73	0E	39	04	9C	00	54	03	E0	01	32	00
25C0	54	03	E1	01	18	04	73	02	01	00	99	19	0D	00	1E	C0
25D0	54	00	00	00	00	0A	76	00	A4	02	00	04	09	00	21	AA
25E0	04	D2	E8	50	48	05	0A	00	C9	00	32	03	00	A8	00	00
25F0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2600	EC	81	2D	01	0E	00	34	08	05	08	07	00	01	00	00	00
2610	80	00	54	03	00	10	52	0B	8C	0B	B6	0B	21	0C	6C	0C
2620	63	0D	73	0E	73	0E	47	04	32	00	54	03	E0	01	32	00
2630	54	03	E1	01	18	04	73	02	01	00	00	18	0D	00	1E	C0
2640	54	00	00	00	A6	0A	76	00	A4	02	00	05	00	00	21	AA
2650	04	D2	E8	50	48	05	0A	00	97	00	02	03	00	A8	00	00
2660	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2670	24	02	32	01	22	08	40	08	10	00	0F	00	01	08	00	00
2680	F0	03	54	03	00	10	1E	0C	10	0D	22	0E	43	0F	B6	0F
2690	CD	11	3A	13	C4	14	49	04	32	00	54	03	E0	01	32	00

Table 1-13

## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
26A0	54	03	E1	01	47	04	F1	01	8A	C0	9A	19	09	00	0A	C0
26B0	40	00	00	00	A6	0A	C8	00	80	07	00	05	1A	00	21	AA
26C0	04	D2	E8	50	48	05	0A	00	36	00	02	03	0F	90	00	00
26D0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
26E0	96	0F	00	59	C8	93	92	24	C0	C2	F2	0A	8E	8E	19	36
26F0	00	30	A0	1B	04	A0	04	04	C8	00	00	C4	00	00	06	00
2700	F8	08	6E	CA	1E	AC	00	02	10	42	04	C4	0C	40	0C	10
2710	08	6C	00	CC	A1	38	02	00	EE	04	20	03	00	00	00	00
2720	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2730	96	0F	00	59	C8	93	92	24	C0	C2	F2	0A	8E	8E	19	36
2740	C0	3F	A0	1B	04	A0	04	04	C8	00	00	C4	00	00	06	00
2750	F8	08	6E	CA	1E	AC	00	02	10	42	02	44	0C	40	0C	10
2760	08	6C	00	C0	A1	38	02	00	EE	04	20	01	00	00	00	00
2770	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2780	96	0F	00	59	C8	93	92	24	B4	C2	E6	0A	82	8E	19	36
2790	00	30	A0	1B	04	A0	04	04	C8	00	00	C4	00	00	06	00
27A0	EC	08	6E	CA	0A	AC	00	23	10	82	04	84	18	40	18	10
27B0	08	2C	00	0C	E2	38	00	00	EE	04	20	01	00	00	00	00
27C0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
27D0	96	0F	00	59	C8	B3	92	24	C0	C2	F2	0A	8E	8E	19	36
27E0	00	30	A0	1B	04	A0	04	04	C8	00	00	C4	00	00	06	00
27F0	F8	08	6E	CA	1E	AC	00	02	10	42	04	C4	0C	40	0C	10
2800	08	6C	00	CC	A1	38	02	00	EE	04	20	03	00	00	00	00
2810	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2820	96	0F	00	59	C8	B3	92	24	C0	C2	F2	0A	8E	8E	19	36
2830	C0	3F	A0	1B	04	A0	04	04	C8	00	00	C4	00	00	66	01
2840	F8	08	6E	CA	1E	AC	00	02	10	42	02	44	0C	40	0C	10
2850	08	6C	00	C0	A1	38	02	00	EE	04	20	01	00	00	00	00
2860	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2870	96	0F	00	59	C8	B3	92	24	B4	C2	E6	0A	82	8E	19	36
2880	00	30	A0	1B	04	A0	04	04	C8	00	00	C4	00	00	06	00
2890	EC	08	6E	CA	0A	AC	00	23	10	82	04	84	18	40	18	10

Table 1-14

## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
28A0	08	2C	00	0C	61	38	08	00	2E	17	20	01	00	00	00	00
28B0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
28C0	96	0F	09	59	CA	B3	92	24	C0	C2	F2	0A	8E	8E	19	36
28D0	00	30	A0	1B	04	A0	04	04	C8	00	00	C4	00	00	06	00
28E0	F8	08	6E	CA	1E	AC	00	02	10	42	04	C4	0C	40	0C	10
28F0	08	6C	00	C0	A1	38	02	00	EE	04	20	01	00	00	00	00
2900	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2910	96	0F	09	59	CA	B3	92	24	C0	C2	F2	0A	8E	8E	19	36
2920	00	30	A0	1B	04	A0	04	04	C8	00	00	C4	00	00	06	00
2930	F8	08	6E	CA	1E	AC	00	02	10	42	02	44	0C	40	0C	10
2940	08	6C	00	C0	A1	38	02	00	EE	04	20	01	00	00	00	00
2950	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2960	96	0F	09	59	CA	B3	92	24	B4	C2	E6	0A	82	8E	19	36
2970	00	30	A0	1B	04	A0	04	04	C8	00	00	C4	00	00	06	00
2980	EC	08	6E	CA	0A	AC	00	22	10	42	04	44	0C	40	0C	10
2990	08	6C	00	C0	22	39	00	00	EE	04	20	02	00	00	00	00
29A0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
29B0	87	08	06	59	CA	B3	92	24	C0	C2	F2	0A	8E	8E	AA	36
29C0	00	00	A0	1B	A0	A0	A0	04	C8	00	00	C4	00	00	06	00
29D0	F8	08	9A	CA	1E	AC	00	02	10	42	04	C4	0C	40	0C	10
29E0	08	6C	00	CC	A1	38	02	00	EE	04	20	01	00	00	00	00
29F0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2A00	87	08	06	59	CA	B3	92	24	C0	C2	F2	0A	8E	8E	AA	36
2A10	00	00	A0	1B	A0	A0	A0	04	C8	00	00	C4	00	00	06	00
2A20	F8	08	9A	CA	1E	AC	00	02	10	42	02	44	0C	40	0C	10
2A30	08	6C	00	C0	A1	38	02	00	EE	04	20	01	00	00	00	00
2A40	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2A50	87	08	06	59	CA	B3	92	24	B4	C2	E6	0A	82	8E	AA	36
2A60	00	00	A0	1B	A0	A0	A0	04	C8	00	00	C4	00	00	06	00
2A70	EC	08	9A	CA	0A	AC	00	22	10	42	04	44	0C	40	0C	10
2A80	08	6C	00	C0	22	39	00	00	EE	04	20	02	00	00	00	00
2A90	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00

Table 1-15

## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
2AA0	96	0F	12	59	C8	B3	92	24	C0	C2	F2	0A	8E	8E	19	36
2AB0	00	30	A0	1B	A0	A0	A0	04	C8	00	00	C4	00	00	06	00
2AC0	F8	08	6E	CA	1E	AC	00	02	10	42	04	C4	0C	40	0C	10
2AD0	08	6C	00	C0	A1	38	02	00	EE	04	20	03	00	00	FE	43
2AE0	FF	43	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2AF0	96	0F	12	59	CA	B3	92	24	C0	C2	F2	0A	8E	8E	19	36
2B00	00	30	A0	1B	04	A0	04	04	C8	00	00	C4	00	00	06	00
2B10	F8	08	6E	CA	1E	AC	00	02	10	42	02	44	0C	40	0C	10
2B20	08	6C	00	C0	A1	38	02	00	EE	04	20	01	00	00	00	00
2B30	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2B40	96	0F	12	59	CA	B3	92	24	B4	C2	E6	0A	82	8E	19	36
2B50	00	30	A0	1B	04	A0	04	04	C8	00	00	C4	00	00	06	00
2B60	EC	08	6E	CA	0A	AC	00	22	10	82	04	84	18	40	18	10
2B70	08	2C	00	C0	E2	38	00	00	EE	04	20	01	00	00	FE	43
2B80	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2B90	80	00	2C	00	2C	00	A0	00	55	00	FF	0F	00	00	00	00
2BA0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2BB0	80	00	2C	00	2C	00	A0	00	55	00	FF	0F	00	00	00	00
2BC0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2BD0	80	00	2C	00	2C	00	80	00	55	01	FF	0F	00	00	00	00
2BE0	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2BF0	80	00	2C	00	2C	00	80	00	55	06	77	07	00	00	00	00
2C00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2C10	A0	00	A0	00	A0	00	A0	00	00	06	FF	0F	00	00	00	00
2C20	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2C30	A0	00	A0	00	A0	00	A0	00	55	06	00	00	00	00	00	00
2C40	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
2C50	06	10	00	00	00	00	00	00	06	46	00	00	00	00	00	00
2C60	06	0C	00	00	00	00	00	00	06	FF	00	00	00	00	00	00
2C70	06	10	00	00	00	00	00	00	06	46	00	00	00	00	00	00
2C80	06	10	00	00	00	00	00	00	06	FF	00	00	00	00	00	00
2C90	06	10	00	00	00	00	00	00	06	46	00	00	00	00	00	00

Table 1-16

## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
2CA0	06	10	00	00	00	00	00	00	06	FF	00	00	00	00	00	00
2CB0~ 2CE0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
2CF0	FF	FF	FF	FF	FF	FF	3C	FF	6E	FF	FF	FF	FF	FF	FF	FF
2D00	20	00	04	00	02	00	04	00	20	3C	02	00	3C	00	50	00
2D10	B4	00	C8	00	2E	00	54	03	98	01	30	02	19	40	0A	11
2D20	04	01	00	00	04	00	00	00	04	02	3C	3C	37	00	04	00
2D30	1E	20	00	00	04	00	00	00	04	00	32	06	80	00	00	00
2D40	50	00	3C	1E	00	00	30	00	40	00	54	00	39	00	86	01
2D50	20	00	04	00	02	00	04	00	20	3C	02	00	3C	00	50	00
2D60	B4	00	C8	00	2E	00	54	03	98	01	30	02	19	40	0A	11
2D70	04	01	00	00	04	00	00	00	04	02	3C	3C	37	00	04	00
2D80	1E	20	00	00	04	00	00	00	04	00	32	06	80	00	00	00
2D90	50	00	3C	1E	00	00	30	00	40	00	54	00	39	00	86	01
2DA0	20	00	04	00	02	00	04	00	20	3C	02	00	3C	00	50	00
2DB0	64	00	64	00	2E	00	54	03	54	01	30	02	19	40	0A	11
2DC0	04	01	28	1E	04	00	00	00	04	02	3C	3C	37	00	04	00
2DD0	1E	20	00	00	04	00	00	00	04	00	32	06	80	00	00	00
2DE0	50	00	3C	1E	00	00	64	00	40	00	3F	00	39	00	86	01
2DF0~ 2E30	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
2E40	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	00	98	08	04
2E50~ 2EA0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
2EB0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	00	98	08	04
2EC0~ 2FF0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
3000	00	01	02	03	04	06	07	09	0C	0E	11	14	17	1A	1D	21
3010	25	29	2D	31	35	3A	3F	43	48	4D	53	58	5D	63	69	6E
3020	74	7A	80	86	8C	93	99	9F	A4	AA	B1	B7	BE	C4	CB	D1
3030	D8	DF	E5	EC	F3	F9	00	07	0D	14	1B	22	28	2F	35	3C
3040	43	49	50	56	5D	63	69	70	76	7C	82	88	8E	94	9A	A0
3050	A6	AB	AE	B3	B9	BE	C3	C8	CE	D3	D8	DD	E1	E6	EB	F0
3060	F4	F9	FD	02	06	0B	0F	13	14	18	1C	21	25	29	2D	31
3070	35	39	3D	41	45	49	4D	50	54	58	5C	5F	63	67	6A	6E
3080	71	75	78	7C	7F	83	86	89	8D	90	93	97	9A	9D	A0	A3
3090	A7	AA	AD	B0	B3	B6	B9	BC	BF	C2	C5	C8	CB	CE	D1	D4

Table 1-17



## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
30A0	D7	DA	DD	E0	E3	E6	E8	EB	EE	F1	F4	F7	F9	FC	FF	02
30B0	05	07	0A	0D	10	12	15	18	1B	1D	20	23	26	28	2B	2E
30C0	31	33	36	39	3C	3E	41	44	47	4A	4C	4F	52	55	58	5A
30D0	5D	60	63	66	69	6B	6E	71	74	77	7A	7D	80	83	86	89
30E0	8C	8F	92	95	98	9B	9E	A2	A5	A8	AB	AE	B2	B5	B8	BC
30F0	BF	C2	C6	C9	CC	D0	D3	D7	DA	DE	E2	E5	E9	EC	F0	FC
3100	00	01	02	03	04	06	07	09	0C	0E	11	14	17	1A	1D	21
3110	25	29	2D	31	35	3A	3F	43	48	4D	53	58	5D	63	69	6E
3120	74	7A	80	86	8C	93	99	9F	A4	AA	B1	B7	BE	C4	CB	D1
3130	D8	DF	E5	EC	F3	F9	00	07	0D	14	1B	22	28	2F	35	3C
3140	43	49	50	56	5D	63	69	70	76	7C	82	88	8E	94	9A	A0
3150	A6	AB	AE	B3	B9	BE	C3	C8	CE	D3	D8	DD	E1	E6	EB	F0
3160	F4	F9	FD	02	06	0B	0F	13	14	18	1C	21	25	29	2D	31
3170	35	39	3D	41	45	49	4D	50	54	58	5C	5F	63	67	6A	6E
3180	71	75	78	7C	7F	83	86	89	8D	90	93	97	9A	9D	A0	A3
3190	A7	AA	AD	B0	B3	B6	B9	BC	BF	C2	C5	C8	CB	CE	D1	D4
31A0	D7	DA	DD	E0	E3	E6	E8	EB	EE	F1	F4	F7	F9	FC	FF	02
31B0	05	07	0A	0D	10	12	15	18	1B	1D	20	23	26	28	2B	2E
31C0	31	33	36	39	3C	3E	41	44	47	4A	4C	4F	52	55	58	5A
31D0	5D	60	63	66	69	6B	6E	71	74	77	7A	7D	80	83	86	89
31E0	8C	8F	92	95	98	9B	9E	A2	A5	A8	AB	AE	B2	B5	B8	BC
31F0	BF	C2	C6	C9	CC	D0	D3	D7	DA	DE	E2	E5	E9	EC	F0	FC
3200	00	01	02	03	04	06	07	09	0C	0E	11	14	17	1A	1D	21
3210	25	29	2D	31	35	3A	3F	43	48	4D	53	58	5D	63	69	6E
3220	74	7A	80	86	8C	93	99	9F	A4	AA	B1	B7	BE	C4	CB	D1
3230	D8	DF	E5	EC	F3	F9	00	07	0D	14	1B	22	28	2F	35	3C
3240	43	49	50	56	5D	63	69	70	76	7C	82	88	8E	94	9A	A0
3250	A6	AB	AE	B3	B9	BE	C3	C8	CE	D3	D8	DD	E1	E6	EB	F0
3260	F4	F9	FD	02	06	0B	0F	13	14	18	1C	21	25	29	2D	31
3270	35	39	3D	41	45	49	4D	50	54	58	5C	5F	63	67	6A	6E
3280	71	75	78	7C	7F	83	86	89	8D	90	93	97	9A	9D	A0	A3
3290	A7	AA	AD	B0	B3	B6	B9	BC	BF	C2	C5	C8	CB	CE	D1	D4

Table 1-18

## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
32A0	D7	DA	DD	E0	E3	E6	E8	EB	EE	F1	F4	F7	F9	FC	FF	02
32B0	05	07	0A	0D	10	12	15	18	1B	1D	20	23	26	28	2B	2E
32C0	31	33	36	39	3C	3E	41	44	47	4A	4C	4F	52	55	58	5A
32D0	5D	60	63	66	69	6B	6E	71	74	77	7A	7D	80	83	86	89
32E0	8C	8F	92	95	98	9B	9E	A2	A5	A8	AB	AE	B2	B5	B8	BC
32F0	BF	C2	C6	C9	CC	D0	D3	D7	DA	DE	E2	E5	E9	EC	F0	FC
3300	36	63	AF	36	63	AF	36	63	AF	FF	FF	FF	FF	FF	FF	FF
3310~ 3FF0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4000	14	28	01	00	01	00	00	00	00	00	00	00	00	00	02	43
4010	00	00	03	00	00	00	06	00	00	00	00	00	00	00	42	00
4020	00	00	00	00	00	00	00	00	42	46	41	00	01	45	00	00
4030	00	00	00	00	00	00	00	00	46	00	00	00	00	00	00	00
4040	00	00	0D	03	41	00	07	08	00	00	00	00	00	00	00	00
4050	00	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
4060~ 4070	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4080	14	28	01	00	01	00	00	00	00	00	00	00	00	00	02	43
4090	00	00	03	00	00	00	06	00	00	00	00	00	00	00	42	00
40A0	00	00	00	00	00	00	00	00	42	46	41	00	01	45	00	00
40B0	00	00	00	00	00	00	00	00	46	00	00	00	00	00	00	00
40C0	00	00	0D	03	41	00	07	08	00	00	00	00	00	00	00	00
40D0	00	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
40E0~ 40F0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4100	14	20	01	00	43	00	00	00	45	00	00	00	42	00	00	43
4110	43	00	42	00	00	00	00	00	00	00	00	00	00	00	00	00
4120	00	00	46	00	00	00	00	00	48	46	00	00	46	45	00	00
4130	00	00	00	00	00	00	00	00	03	00	00	00	02	00	00	00
4140	00	00	07	03	00	00	0C	08	00	00	00	00	00	00	00	00
4150	00	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
4160~ 4170	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4180	14	28	01	00	01	00	00	00	00	00	00	00	00	00	02	43
4190	00	00	03	00	07	00	06	00	00	00	00	00	00	00	42	00

Table 1-19

## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
41A0	00	00	44	00	00	00	00	00	42	46	41	00	01	45	00	00
41B0	00	00	00	00	00	00	00	00	46	00	00	00	00	00	00	00
41C0	00	00	0D	03	41	00	07	08	00	00	00	00	00	00	00	00
41D0	00	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
41E0~ 41F0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4200	14	00	01	00	01	00	00	00	00	00	00	00	00	00	02	43
4210	00	00	03	00	00	00	06	00	00	00	00	00	00	00	42	00
4220	00	00	00	00	00	00	00	00	42	46	41	00	01	45	00	00
4230	00	00	00	00	00	00	00	00	46	00	00	00	00	00	00	00
4240	00	00	0D	03	41	00	07	08	00	00	00	00	00	00	00	00
4250	00	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
4260~ 4270	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4280	14	28	01	00	43	00	00	00	45	00	00	00	42	00	00	43
4290	43	00	42	00	00	00	00	00	00	00	00	00	00	00	00	00
42A0	00	00	46	00	00	00	00	00	48	46	00	00	46	45	00	00
42B0	00	00	00	00	00	00	00	00	03	00	00	00	02	00	00	00
42C0	00	00	07	03	00	00	0C	08	00	00	00	00	00	00	00	00
42D0	00	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
42E0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
42F0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4300	01	00	01	00	4B	00	0E	00	48	00	47	00	47	00	46	00
4310	42	00	0A	00	07	00	13	00	00	00	47	00	47	00	46	00
4320	0A	00	44	00	0D	00	41	00	48	00	01	00	46	00	4D	00
4330	0C	00	00	00	58	00	0C	00	05	00	05	00	42	00	43	00
4340	04	00	00	00	41	00	07	00	15	00	0A	00	00	00	07	00
4350	0D	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
4360~ 4370	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4380	14	28	01	00	4B	00	0E	00	48	00	47	00	47	00	46	00
4390	42	00	0A	00	07	00	13	00	00	00	47	00	47	00	46	00

Table 1-20

## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
43A0	0A	00	44	00	0D	00	41	00	48	00	01	00	46	00	4D	00
43B0	0C	00	00	00	58	00	0C	00	05	00	05	00	42	00	43	00
43C0	04	00	00	00	41	00	07	00	15	00	0A	00	00	00	07	00
43D0	0D	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
43E0~ 43F0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4400	14	28	01	00	43	00	00	00	45	00	00	00	42	00	00	43
4410	43	00	42	00	00	00	00	00	00	00	00	00	00	00	00	00
4420	00	00	46	00	00	00	00	00	48	46	00	00	4D	45	00	00
4430	00	00	00	00	00	00	00	00	03	00	00	00	02	00	00	00
4440	00	00	07	03	00	00	0C	08	00	00	00	00	00	00	00	00
4450	00	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
4460~ 4470	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4480	14	28	01	00	01	00	00	00	00	00	00	00	00	00	02	43
4490	00	00	03	00	00	00	06	00	00	00	00	00	00	00	42	00
44A0	00	00	00	00	00	00	00	00	42	46	41	00	01	45	00	00
44B0	00	00	00	00	00	00	00	00	46	00	00	00	00	00	00	00
44C0	00	00	0D	03	41	00	07	08	00	00	00	00	00	00	00	00
44D0	00	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
44E0~ 44F0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4500	14	28	01	00	01	00	00	00	00	00	00	00	00	00	02	43
4510	00	00	03	00	00	00	06	00	00	00	00	00	00	00	42	00
4520	00	00	00	00	00	00	00	00	42	46	41	00	01	45	00	00
4530	00	00	00	00	00	00	00	00	46	00	00	00	00	00	00	00
4540	00	00	0D	03	41	00	07	08	00	00	00	00	00	00	00	00
4550	00	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
4560~ 4570	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4580	28	28	01	00	43	00	00	00	45	00	00	00	42	00	00	43
4590	43	00	42	00	00	00	00	00	00	00	00	00	00	00	00	00

Table 1-21

## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
45A0	00	00	46	00	00	00	00	00	48	46	00	00	46	45	00	00
45B0	00	00	00	00	00	00	00	00	03	00	00	00	02	00	00	00
45C0	00	00	07	03	00	00	0C	08	00	00	00	00	00	00	00	00
45D0	00	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
45E0~ 45F0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4600	14	28	01	00	01	00	00	00	00	00	00	00	00	00	02	43
4610	00	00	03	00	00	00	06	00	00	00	00	00	00	00	42	00
4620	00	00	00	00	00	00	00	00	42	46	41	00	01	45	00	00
4630	00	00	00	00	00	00	00	00	46	00	00	00	00	00	00	00
4640	00	00	0D	03	41	00	07	08	00	00	00	00	00	00	00	00
4650	00	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
4660~ 4670	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4680	14	28	01	00	00	00	00	00	00	00	00	00	00	00	05	43
4690	00	00	07	00	00	00	00	00	00	00	00	00	00	00	00	00
46A0	00	00	00	00	00	00	00	00	02	46	00	00	4A	45	47	00
46B0	00	00	00	00	00	00	00	00	02	00	00	00	00	00	00	00
46C0	00	00	01	03	00	00	00	08	48	00	00	00	00	00	00	00
46D0	00	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
46E0~ 46F0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4700	14	28	01	00	00	00	00	00	00	00	00	00	00	00	05	43
4710	00	00	07	00	00	00	00	00	00	00	00	00	00	00	00	00
4720	00	00	00	00	00	00	00	00	02	46	00	00	4A	45	47	00
4730	00	00	00	00	00	00	00	00	02	00	00	00	00	00	00	00
4740	00	00	01	03	00	00	00	08	48	00	00	00	00	00	00	00
4750	00	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
4760	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4770	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4780	14	28	01	00	09	00	46	00	02	00	42	00	00	00	04	43
4790	00	00	12	00	00	00	45	00	48	00	44	00	09	00	00	00

Table 1-22

## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
47A0	08	00	43	00	41	00	00	00	02	46	00	00	44	45	00	00
47B0	0B	00	0C	00	09	00	44	00	00	00	44	00	07	00	01	00
47C0	00	00	00	03	00	00	01	08	00	00	45	00	43	00	0C	00
47D0	02	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
47E0~ 47F0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4800	14	28	01	00	43	00	00	00	45	00	00	00	42	00	00	43
4810	43	00	42	00	00	00	00	00	00	00	00	00	00	00	00	00
4820	00	00	46	00	00	00	00	00	48	46	00	00	46	45	00	00
4830	00	00	00	00	00	00	00	00	03	00	00	00	02	00	00	00
4840	00	00	07	03	00	00	0C	08	00	00	00	00	00	00	00	00
4850	00	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
4860^ 4870	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4880	14	28	01	00	0C	00	42	00	43	00	00	00	01	00	09	43
4890	00	00	0F	00	00	00	00	00	48	00	00	00	00	00	46	00
48A0	06	00	43	00	00	00	00	00	01	46	00	00	05	45	00	00
48B0	00	00	0B	00	00	00	00	00	42	00	42	00	07	00	00	00
48C0	00	00	01	03	00	00	09	08	00	00	00	00	44	00	00	00
48D0	00	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
48E0~ 48F0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4900	FF	FF	01	00	0C	00	42	00	43	00	00	00	00	00	09	43
4910	00	00	0F	00	00	00	00	00	48	00	00	00	00	00	46	00
4920	06	00	43	00	00	00	00	00	01	46	00	00	05	45	00	00
4930	00	00	0B	00	00	00	00	00	42	00	42	00	07	00	00	00
4940	00	00	01	03	00	00	09	08	00	00	00	00	44	00	00	00
4950	00	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
4960~ 4970	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4980	14	28	01	00	09	00	46	00	02	00	42	00	00	00	04	43
4990	00	00	12	00	00	00	45	00	48	00	44	00	09	00	00	00

Table 1-23

## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
49A0	08	00	43	00	41	00	00	00	02	46	00	00	44	45	00	00
49B0	0B	00	0C	00	09	00	44	00	00	00	44	00	07	00	01	00
49C0	00	00	00	03	00	00	01	08	00	00	45	00	43	00	0C	00
49D0	02	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
49E0~ 49F0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4A00	14	28	00	00	4B	00	0E	00	48	00	47	00	47	00	46	00
4A10	42	00	0A	00	07	00	13	00	00	00	47	00	47	00	46	00
4A20	0A	00	44	00	0D	00	41	00	48	00	47	00	47	00	46	00
4A30	0C	00	00	00	41	00	07	00	15	00	0A	00	00	00	07	00
4A40	04	00	00	00	41	00	07	00	15	00	0A	00	00	00	07	00
4A50	0D	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
4A60~ 4A70	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4A80	14	28	01	00	01	00	00	00	00	00	00	00	00	00	02	43
4A90	00	00	03	00	00	00	06	00	00	00	00	00	00	00	42	00
4AA0	00	00	00	00	00	00	00	00	42	46	41	00	01	45	00	00
4AB0	00	00	00	00	00	00	00	00	46	00	00	00	00	00	00	00
4AC0	00	00	0D	03	41	00	07	08	00	00	00	00	00	00	00	00
4AD0	00	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
4AE0~ 4AF0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4B00	14	28	01	00	01	00	00	00	00	00	00	00	00	00	02	43
4B10	00	00	03	00	00	00	06	00	00	00	00	00	00	00	42	00
4B20	00	00	00	00	00	00	00	00	42	46	41	00	01	45	00	00
4B30	00	00	00	00	00	00	00	00	46	00	00	00	00	00	00	00
4B40	00	00	0D	03	41	00	07	08	00	00	00	00	00	00	00	00
4B50	00	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
4B60~ 4B70	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4B70	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4B80	14	28	01	00	43	00	00	00	45	00	00	00	42	00	00	43
4B90	43	00	42	00	00	00	00	00	00	00	00	00	00	00	00	00

Table 1-24

## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
4BA0	00	00	46	00	00	00	00	00	48	46	00	00	46	45	00	00
4BB0	00	00	00	00	00	00	00	00	03	00	00	00	02	00	00	00
4BC0	00	00	07	03	00	00	0C	08	00	00	00	00	00	00	00	00
4BD0	00	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
4BE0~ 4BF0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4C00	20	00	00	00	02	00	04	00	20	3C	00	00	3C	00	50	00
4C10	B4	00	C8	00	2E	00	54	03	62	01	FE	05	19	40	0A	11
4C20	04	01	00	00	04	00	00	00	00	00	C8	3C	37	00	00	00
4C30	96	20	00	00	04	00	00	00	04	00	38	06	80	00	00	00
4C40	50	00	F0	B4	00	00	60	00	80	00	60	00	7E	00	86	01
4C50~ 4C70	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4C80	20	00	00	00	02	00	04	00	20	3C	00	00	3C	00	50	00
4C90	B4	00	C8	00	2E	00	54	03	74	01	16	06	19	40	0A	11
4CA0	04	01	00	00	04	00	00	00	00	00	C8	3C	37	00	00	00
4CB0	96	20	00	00	04	00	00	00	04	00	38	06	80	00	00	00
4CC0	50	00	F0	B4	00	00	60	00	80	00	57	00	6E	00	86	01
4CD0~ 4CF0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4D00	20	00	00	00	02	00	04	00	20	3C	00	00	3C	00	50	00
4D10	B4	00	C8	00	2E	00	54	03	F2	01	12	04	19	40	0A	11
4D20	04	01	00	00	04	00	00	00	00	00	C8	3C	37	00	00	00
4D30	96	20	00	00	04	00	00	00	04	00	37	06	80	00	00	00
4D40	50	00	F0	B4	00	00	60	00	80	00	7C	00	4A	00	86	01
4D50~ 4D70	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4D80	20	00	00	00	02	00	04	00	20	3C	00	00	3C	00	50	00
4D90	B4	00	C8	00	2E	00	54	03	62	01	FE	05	19	40	0A	11
4DA0	04	01	00	00	04	00	00	00	00	00	C8	3C	37	00	00	00
4DB0	96	20	00	00	04	00	00	00	04	00	38	06	80	00	00	00
4DC0	50	00	F0	B4	00	00	60	00	80	00	60	00	7E	00	86	01
4DD0~ 4DF0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF

Table 1-25



## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
4E00	14	28	01	00	00	00	00	00	00	00	00	00	00	00	05	43
4E10	00	00	07	00	00	00	00	00	00	00	00	00	00	00	00	00
4E20	00	00	00	00	00	00	00	00	02	46	00	00	4A	45	47	00
4E30	00	00	00	00	00	00	00	00	02	00	00	00	00	00	00	00
4E40	00	00	01	03	00	00	00	08	48	00	00	00	00	00	00	00
4E50	00	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
4E60~ 4E70	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4E80	14	28	01	00	00	00	46	00	02	00	42	00	00	00	04	43
4E90	00	00	0E	00	00	00	43	00	48	00	44	00	09	00	04	00
4EA0	08	00	43	00	41	00	00	00	43	46	00	00	0A	45	00	00
4EB0	0B	00	0C	00	09	00	44	00	0A	00	44	00	07	00	01	00
4EC0	00	00	02	03	00	00	08	08	00	00	45	00	43	00	0C	00
4ED0	02	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
4EE0~ 4EF0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4F00	FF	FF	01	00	0C	00	42	00	43	00	00	00	00	00	09	43
4F10	00	00	0F	00	00	00	00	00	48	00	00	00	00	00	46	00
4F20	06	00	43	00	00	00	00	00	01	46	00	00	05	45	00	00
4F30	00	00	0B	00	00	00	00	00	42	00	42	00	07	00	00	00
4F40	00	00	01	03	00	00	09	08	00	00	00	00	44	00	00	00
4F50	00	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
4F60~ 4F70	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4F80	14	28	01	00	00	00	46	00	02	00	42	00	00	00	04	43
4F90	00	00	0E	00	00	00	43	00	48	00	44	00	09	00	04	00
4FA0	08	00	43	00	41	00	00	00	43	46	00	00	0A	45	00	00
4FB0	0B	00	0C	00	09	00	44	00	0A	00	44	00	07	00	01	00
4FC0	00	00	02	03	00	00	08	08	00	00	45	00	43	00	0C	00
4FD0	02	00	01	01	20	20	93	53	FF	FF	FF	FF	FF	FF	FF	FF
4FE0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
4FF0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	F3

Table 1-26

## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
5000	00	00	02	00	00	FE	F7	EF	FF	7F	D7	DF	FF	FF	FF	FF
5010~ 5020	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
5030	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	00
5040~ 50C0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
50D0	00	00	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
50E0~ 5430	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
5440	FF	FF	FF	FF	FF	FF	FF	FF	A0	FF	FF	FF	FF	FF	FF	FF
5450	00	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
5460~ 57F0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
5800	00	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
5810~ 5FF0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
6000	01	FC	FF	7F	FF	7F	FF	7F	FF	7F	FF	7F	FF	FF	FF	00
6010	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	D0	86	4C	88
6020	95	8A	BC	90	14	93	04	94	E0	94	1C	9A	6D	9E	C7	9E
6030	C5	A0	FD	A4	DC	A7	83	AB	7C	AD	2D	B1	9C	B5	DC	B6
6040	BC	B8	D4	BE	5C	C3	DC	C5	14	93	1C	9A	26	9D	BC	A9
6050	D5	AD	9C	B5	BC	B8	3C	BB	D4	BE	DA	C2	5C	C3	FF	7F
6060~ 60D0	FF	7F	FF	7F	FF	7F	FF	7F	FF	7F	FF	7F	FF	7F	FF	7F
60E0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	7F	FF	7F
60F0	FF	7F	FF	7F	FF	7F	FF	7F	00	21	F2	01	00	FF	FF	00
6100	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01
6110	01	01	01	01	01	01	03	03	03	03	03	03	03	03	03	03
6120	03	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01
6130~ 6150	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01	01
6160	01	01	01	01	01	01	01	01	01	01	01	01	01	01	FF	00
6170	00	00	00	FE	FF	FF	FF	FF	FF	00	00	00	00	FF	FF	FF
6180	F8	CE	19	19	00	19	19	00	00	00	FF	FF	FF	FF	FF	FF
6190	03	10	19	19	19	19	19	00	19	19	19	00	19	19	19	00

Table 1-27

## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
61A0	19	19	19	19	00	19	19	19	00	19	19	19	19	00	19	FF
61B0	19	19	00	19	FF	FF	FF	FF	FF	FF	FF	FF	FF	00	19	19
61C0	00	00	00	01	00	00	FC	00	00	00	FF	FF	FF	FF	FF	FF
61D0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	43	00	00
61E0	FF	FF	FF	FF	FF	FF	FF	FF	00	18	80	20	FF	00	01	01
61F0	03	03	05	03	03	03	03	03	03	00	00	00	00	00	00	FF
6200	00	80	C9	E0	74	34	02	80	CE	EC	FE	F0	90	80	00	13
6210	01	60	00	00	BA	30	30	00	00	00	1E	20	03	03	05	02
6220	00	00	7F	48	40	70	0D	03	0B	40	00	00	00	00	00	00
6230	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	2C
6240	00	00	2C	EA	E1	DB	DB	DB	00	00	00	00	00	00	00	0E
6250	01	10	00	00	00	00	00	00	00	00	00	00	00	00	00	00
6260	80	00	00	00	00	00	40	46	63	68	49	53	65	6A	3A	3D
6270	3E	48	4A	4C	52	57	58	5A	5B	5D	5F	60	61	62	63	64
6280	65	66	67	67	68	68	69	69	6A	6A	6B	6B	6C	6C	6D	6D
6290	6E	6E	6F	6F	70	70	71	71	72	72	73	73	74	74	75	75
62A0	3A	3D	3E	48	4A	4C	52	57	58	5A	5B	5D	5F	60	61	62
62B0	63	64	65	66	67	67	68	68	69	69	6A	6A	6B	6B	6C	6C
62C0	6D	6D	6E	6E	6F	6F	70	70	71	71	72	72	73	73	74	74
62D0	75	75	DB	DB	98	A6	C9	05	02	00	01	00	2C	13	80	6C
62E0	C4	D4	C1	3C	F6	8C	5C	62	18	75	73	25	38	63	55	55
62F0	00	64	00	64	00	64	00	64	00	64	00	64	00	64	55	AA
6300	79	00	81	00	80	00	7F	00	74	00	85	00	00	00	45	01
6310	2E	01	2A	00	20	00	00	00	FF	00	00	00	80	00	96	00
6320	46	00	80	00	5A	00	FF	00	00	00	7F	00	96	00	3C	00
6330	40	00	7F	00	00	00	80	00	5A	00	64	00	B4	00	57	00
6340	37	00	64	00	00	00	7F	00	96	00	46	00	5A	00	82	00
6350	3C	00	80	00	9B	00	00	00	41	00	B4	00	00	00	21	00
6360	27	01	8E	00	26	00	7B	00	81	00	80	00	80	00	80	00
6370	82	00	82	00	80	00	80	00	80	00	72	00	85	00	79	00
6380	81	00	80	00	7F	00	74	00	84	00	7B	00	81	00	80	00
6390	80	00	80	00	82	00	82	00	80	00	80	00	80	00	72	00

Table 1-28

## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
63A0	85	00	7F	00	96	00	46	00	6E	00	5A	00	B4	00	00	00
63B0	7F	00	96	00	3C	00	37	00	6E	00	00	00	80	00	80	00
63C0	FF	00	00	00	80	00	80	00	FF	00	00	00	80	00	FF	00
63D0	00	00	40	00	7F	00	00	00	80	00	80	00	FF	00	00	00
63E0	80	00	80	00	FF	00	00	00	80	00	FF	00	00	00	40	00
63F0	7F	00	00	00	80	00	80	00	80	00	80	00	80	00	80	00
6400	7C	F6	78	00	AA	00	46	00	FF	FF	80	00	00	00	FF	FF
6410	80	00	B4	00	3C	00	FF	FF	FF	FF	FF	FF	FF	FF	2D	00
6420	20	00	45	01	2E	01	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
6430~ 65F0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
6600	31	F0	28	1F	08	08	20	80	80	80	7F	7F	7F	F6	6E	80
6610	20	04	04	02	00	00	00	00	01	00	00	00	00	00	00	00
6620	38	30	20	FF	10	08	60	80	80	80	7F	7F	7F	F6	6E	B8
6630	28	04	04	02	00	00	00	00	01	00	00	00	00	00	00	00
6640	41	F0	60	1F	08	08	20	80	80	80	7F	7F	7F	F2	6E	80
6650	20	04	04	02	00	00	00	00	01	00	00	00	00	00	00	00
6660	53	F0	70	1F	08	08	20	80	80	80	7F	7F	7F	F2	6E	80
6670	20	04	04	02	00	00	00	00	01	00	00	00	00	00	00	00
6680	67	F0	A0	FF	10	08	60	80	80	80	7F	7F	7F	F6	6E	B8
6690	28	04	04	02	00	00	00	00	01	00	00	00	00	00	00	00
66A0	67	F0	A0	FF	10	08	60	80	80	80	7F	7F	7F	F6	6E	B8
66B0	28	04	04	02	00	00	00	00	01	00	00	00	00	00	00	00
66C0	6B	30	18	F0	07	14	44	80	80	80	7D	50	7D	FF	66	B5
66D0	30	0B	0F	02	00	00	00	00	01	00	00	00	00	00	00	00
66E0	35	90	18	F0	07	14	35	80	80	80	7D	50	7D	FF	66	B5
66F0	30	0B	0F	02	00	00	00	00	01	00	00	00	00	00	00	00
6700	89	70	88	B0	2B	66	94	80	80	80	7F	5C	7F	FF	66	B5
6710	30	0B	0F	02	00	00	00	00	01	00	00	00	00	00	00	00
6720	67	10	88	B0	2B	14	B0	80	80	80	7E	5C	7E	FF	66	B5
6730	20	0B	0F	02	00	00	00	00	01	00	00	00	00	00	00	00
6740	3F	F0	60	1F	08	08	20	80	80	80	7F	7F	7F	F2	6E	80
6750	20	04	04	02	00	00	00	00	01	00	00	00	00	00	00	00
6760	6B	F0	18	F0	07	14	44	80	80	80	7D	50	7D	FF	66	B5
6770	30	0B	0F	02	00	00	00	00	01	00	00	00	00	00	00	00
6780	35	F0	18	F0	07	14	35	80	80	80	7D	50	7D	FF	66	B5
6790	30	0B	0F	02	00	00	00	00	01	00	00	00	00	00	93	00

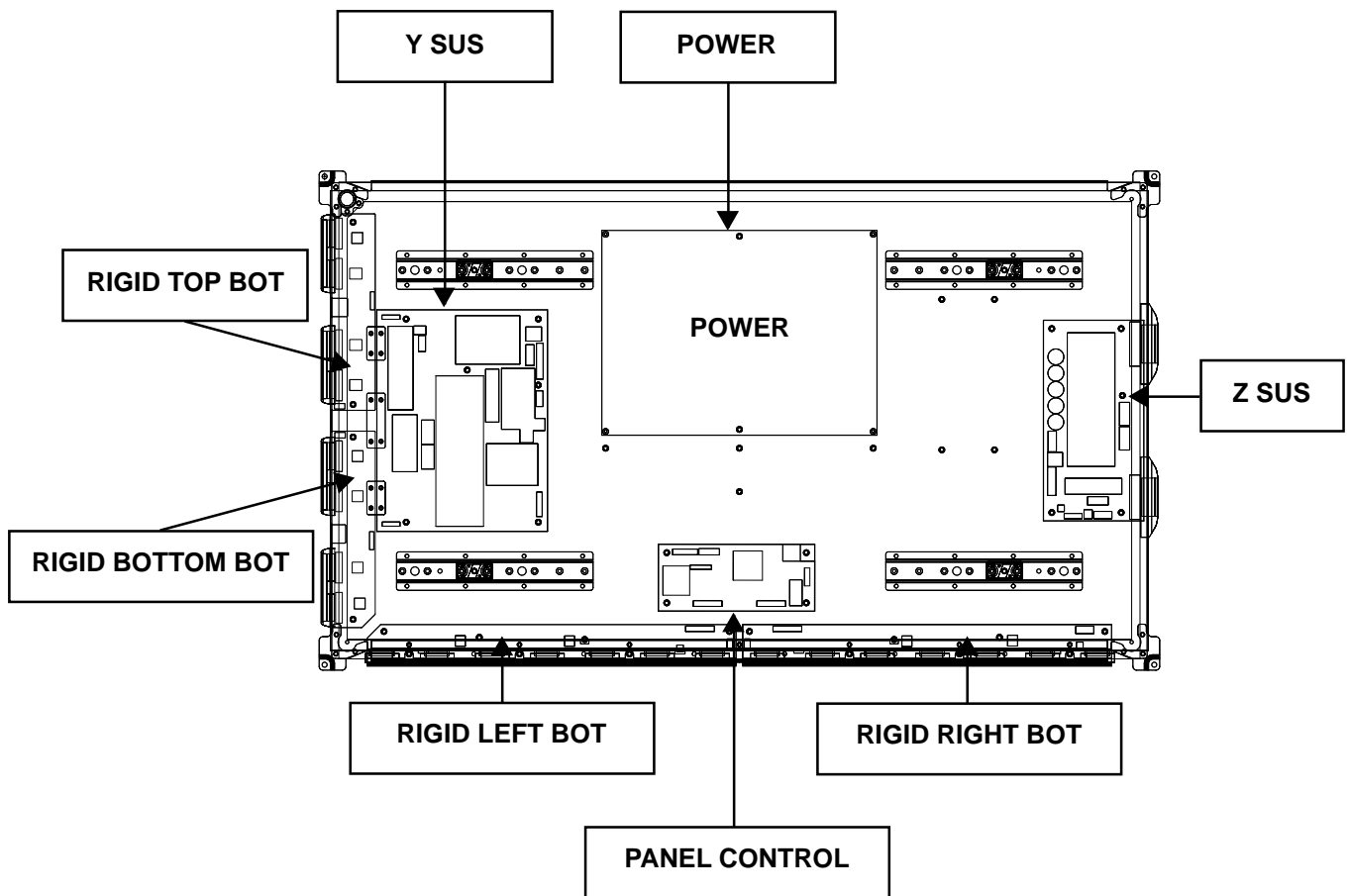
Table 1-29

## WHEN REPLACING EEPROM (MEMORY) IC

INI	+0	+1	+2	+3	+4	+5	+6	+7	+8	+9	+A	+B	+C	+D	+E	+F
67A0	A4	F0	88	B0	2B	66	94	80	80	80	7F	5C	7F	FF	66	B5
67B0	30	0B	0F	02	00	00	00	00	01	00	00	00	00	00	00	00
67C0	7B	B0	88	B0	2B	14	B0	80	80	80	7E	5C	7E	FF	66	B5
67D0	20	0B	0F	02	00	00	00	00	01	00	00	00	00	00	00	00
67E0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
67F0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	12	3C	12	3C
6800~ 6DF0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
6E00	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	20	20	FF	FF	FF
6E10~ 6FE0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
6FF0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	F3
7000	47	DF	FF	BF	F2	FE	F7	EF	FF	7F	D7	DF	FF	FF	FF	FF
7010~ 7020	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
7030	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	00
7040~ 77F0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
7800	00	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
7810~ 7CD0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
7CE0	FF	FF	FF	FF	FF	FF	FF	FC	FF	FF	FF	FF	FF	FF	FF	FF
7CF0~ 7DB0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
7DC0	DF	FF	E7	DF	7E	EF	FB	F5	10	FF	FF	FF	FF	FF	FF	FF
7DD0~ 7DE0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF
7DF0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	CF
7E00~ 7FF0	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF	FF

Table 1-30

## FUNCTION OF PCB



POWER	: A supplier which supplies voltage and current to each PCB and Panel.
Y SUS	: According to the timing provided from Panel Control, switches FETs and generates driving waveform signal which is provided to Y electrode through Scan Driver IC of RIGID TOP BOT and RIGID BOTTOM BOT.
Z SUS	: According to the timing provided from Panel Control, switches FETs and generates driving waveform signal which is provided to Z electrode through Connector.
PANEL CONTROL	: Controls Y electrode, Z electrode, and ADDRESS electrode.
RIGID LEFT BOT	: Generates Address electrode and supplies to Address electrode by Driver IC.
RIGID RIGHT BOT	: Generates Address electrode and supplies to Address electrode by Driver IC.
RIGID TOP BOT	: Generates Scan electrode and supplies to Y electrode by Driver IC.
RIGID BOTTOM BOT	: Generates Scan electrode and supplies to Y electrode by Driver IC.

# ELECTRICAL ADJUSTMENTS

## 1. ADJUSTMENT PROCEDURE

Read and perform these adjustments when repairing the circuits or replacing electrical parts or PCB assemblies.

### CAUTION

- Use an isolation transformer when performing any service on this chassis.
- When removing a PCB or related component, after unfastening or changing a wire, be sure to put the wire back in its original position.
- When you exchange IC and Transistor with a heat sink, apply silicon grease (**YG6260M**) on the contact section of the heat sink. Before applying new silicon grease, remove all the old silicon grease. (Old grease may cause damage to the IC and Transistor).

**Prepare the following measurement tools for electrical adjustments.**

1. Pattern Generator

## 2. BASIC ADJUSTMENTS

### On-Screen Display Adjustment

1. Set the VOLUME to minimum.
2. Press the VOL. DOWN button on the set and the channel button **(9)** on the remote control for more than 2 seconds to display adjustment mode on the screen as shown in **Fig. 2-1**.

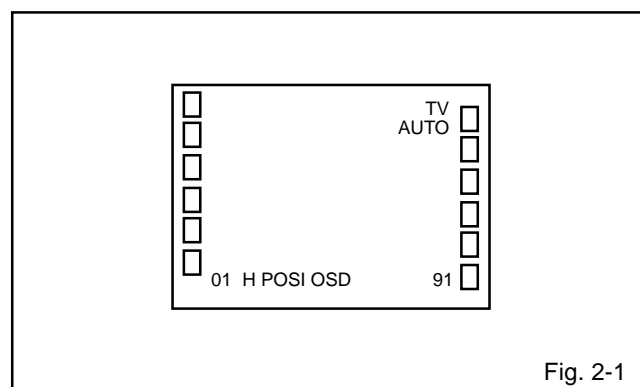


Fig. 2-1

3. Use the Channel UP/DOWN button or Channel button **(0-9)** on the remote control to select the options shown in **Fig. 2-2**.
4. Press the MENU button on the remote control to end the adjustments.
5. To display the adjustment screen for AV mode, press the INPUT SELECT button on the remote control to set to the AV mode. Press the VOL.DOWN button on the set and the channel **(9)** on the remote control for more than 2 seconds.

NO.	FUNCTION	NO.	FUNCTION
01	H POSI OSD	21	H POSI 50Hz
02	V POSI OSD	22	H POSI 60Hz
03	R DRIVE (N)	23	V POSI 50Hz
04	R CUT OFF (N)	24	V POSI 60Hz
05	G DRIVE (N)	28	BRIGHT CENT
06	G CUT OFF (N)	29	BRIGHT MAX
07	B DRIVE (N)	30	BRIGHT MIN
08	B CUT OFF (N)	31	TINT
09	R DRIVE (C)	35	CONTRAST CENTER
10	R CUT OFF (C)	36	CONTRAST MAX
11	G DRIVE (C)	37	CONTRAST MIN
12	G CUT OFF (C)	38	COLOR CENT
13	B DRIVE (C)	39	COLOR MAX
14	B CUT OFF (C)	40	COLOR MIN
15	R DRIVE (W)	41	H POSI TEXT
16	R CUT OFF (W)	42	V POSI TEXT
17	G DRIVE (W)	43	NT COLOR CENT
18	G CUT OFF (W)	44	NT COLOR MAX
19	B DRIVE (W)	45	NT COLOR MIN
20	B CUT OFF (W)		

Fig. 2-2

### 2-1: CONTRAST CENT

1. Receive the monoscope pattern.(RF Input)
2. Activate the adjustment mode display of **Fig. 1-1** and press the channel button **(35)** on the remote control to select "CONTRAST CENTER".
3. Check if the step No. CONT CENT is "132".
4. Receive a broadcast and check if the picture is normal.
5. Press the INPUT SELECT button on the remote control to set to the AV mode. Then perform the above adjustments 1~3.
6. Receive a broadcast and check if the picture is normal.
7. Press the INPUT SELECT button on the remote control to set to the COMPONENT mode. Then perform the above adjustments 1~3.
8. Receive a broadcast and check if the picture is normal.
9. Press the INPUT SELECT button on the remote control to set to the HDMI mode. Then perform the above adjustments 1~3.
- 10.Receive a broadcast and check if the picture is normal.

### 2-2: WHITE BALANCE

1. Place the set in Aging Test for more than 30 minutes.
2. Receive the gray scale pattern from the Pattern Generator.
3. Press the INPUT SELECT button on the remote control to set to the AV mode.
4. Using the remote control, set the brightness and contrast to normal position.
5. Activate the adjustment mode display of **Fig. 1-1** and press the channel button **(03)** on the remote control to select "R DRIVE".
6. Press the CH. UP/DOWN button on the remote control to select the "R CUTOFF", "B.DRIVE" and "B CUTOFF".
7. Adjust the VOL. UP/DOWN button on the remote control to whiten the R CUTOFF, B.DRIVE and B CUTOFF at each step tone sections equally.
8. Perform the above adjustments 5 and 6 until the white color is looked like a white.

## ELECTRICAL ADJUSTMENTS

### 2-3: BRIGHT CENT

1. Receive the monoscope pattern. (RF Input)
2. Set the screen mode to PANORAMIC.
3. Using the remote control, set the brightness and contrast to normal position.
4. Activate the adjustment mode display of **Fig. 1-1** and press the channel button **(28)** on the remote control to select "BRI CENT".
5. Press the VOL. UP/DOWN button on the remote control until the white 2.7% is starting to be visible.
6. Press the INPUT SELECT button on the remote control to set to the AV mode. Then perform the above adjustments 2~5.
7. Press the INPUT SELECT button on the remote control to set to the COMPONENT mode. Then perform the above adjustments 2~5.
8. Press the INPUT SELECT button on the remote control to set to the HDMI mode. Then perform the above adjustments 2~5.



ELECTRICAL ADJUSTMENTS

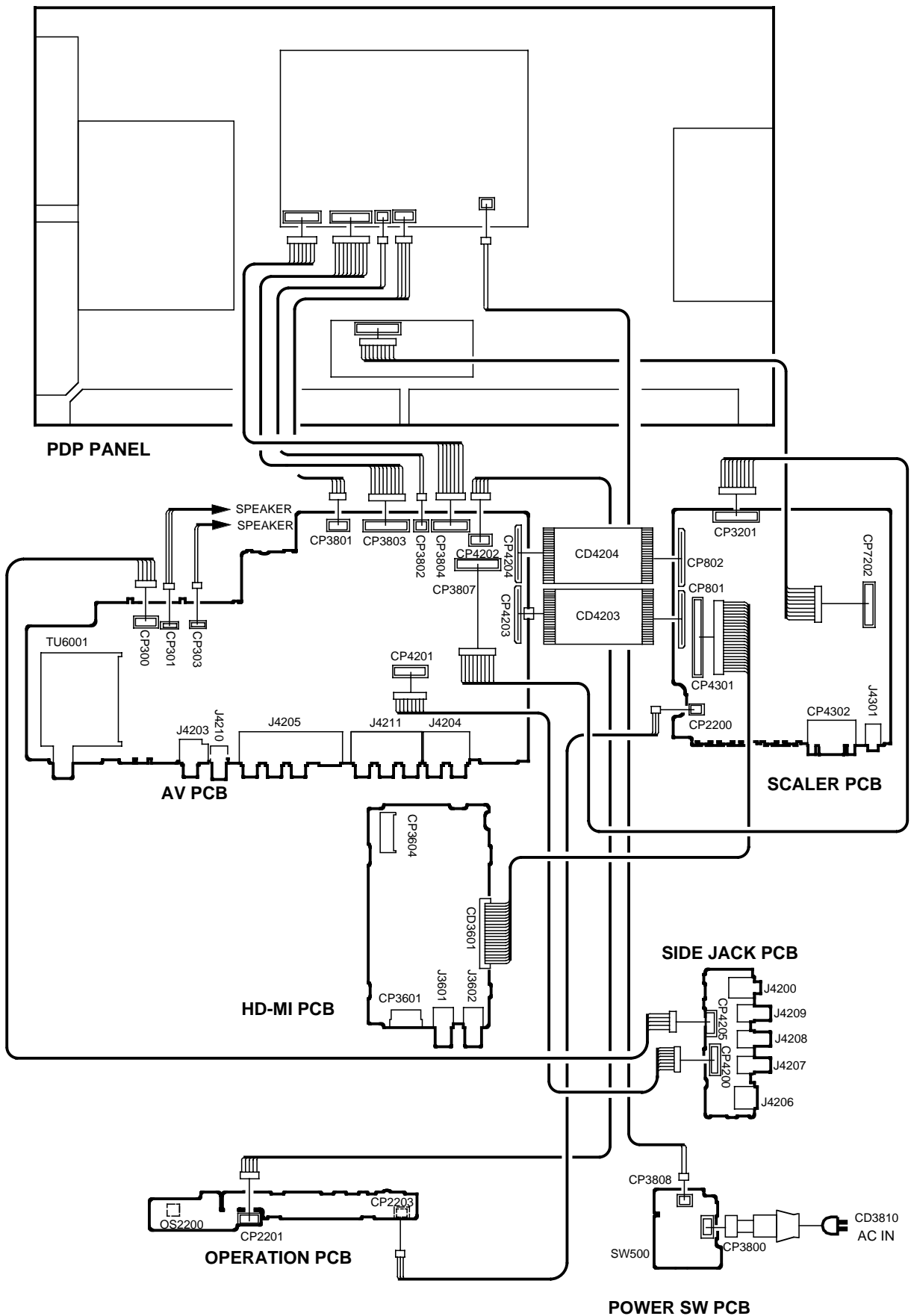
2-4: Confirmation of Fixed Value (Step No.)

Please check if the fixed values of each the adjustment items are set correctly referring below. (TV/AV/PC/COMPONENT/HD-MI)

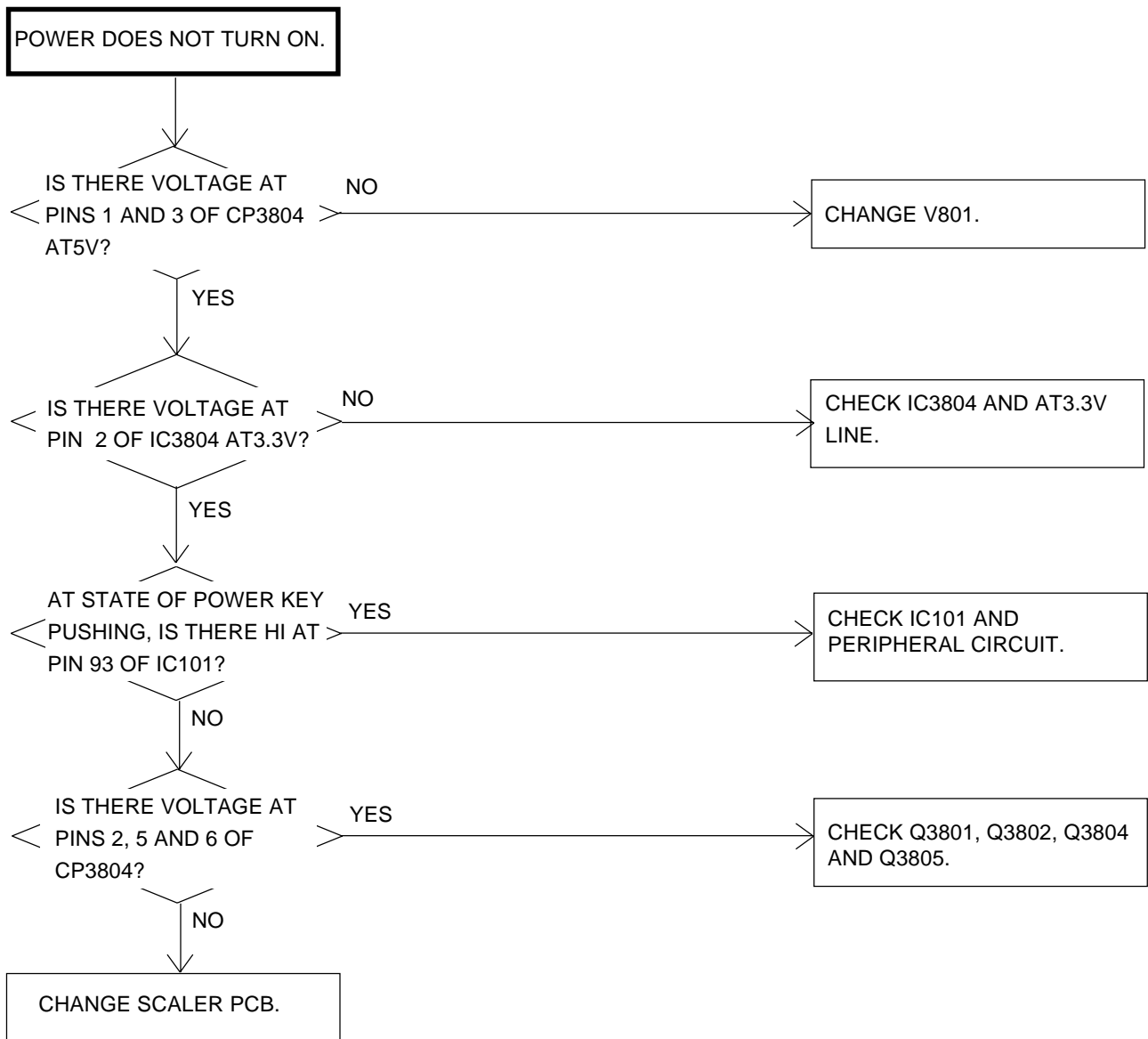
NO.	FUNCTION	TV			AV			PC	COMPONENT								HD-MI							
		PAL	SECAM	NTSC	PAL	SECAM	NTSC		60Hz				50Hz				60Hz				50Hz			
									480i	480p	720p	1080i	576i	576p	720p	1080i	480i	480p	720p	1080i	576i	576p	720p	1080i
Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.	Step No.
1	H POSI OSD	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91	91
2	V POSI OSD	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99
3	R DRIVE (N)	135	135	135	135	135	135	128	129	129	129	129	129	129	129	129	126	126	126	126	129	129	129	129
4	R CUT OFF (N)	126	126	126	127	127	127		130	128	128	128	130	129	129	129	130	129	129	130	130	129	129	130
5	G DRIVE (N)	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128
6	G CUT OFF (N)	128	128	128	128	128	128		128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128
7	B DRIVE (N)	140	140	140	140	140	140	128	139	142	142	142	142	145	145	145	136	141	141	136	144	135	135	144
8	B CUT OFF (N)	128	128	128	129	129	129		129	127	127	125	127	126	126	120	129	129	129	128	132	131	131	126
9	R DRIVE (C)	121	121	121	121	121	121		119	113	113	113	121	116	116	112	121	117	117	111	121	121	121	119
10	R CUT OFF (C)	129	129	129	130	130	130		132	133	133	134	131	133	133	132	132	132	132	133	133	131	131	131
11	G DRIVE (C)	128	128	128	128	128	128		128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128
12	G CUT OFF (C)	128	128	128	128	128	128		128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128
13	B DRIVE (C)	145	145	145	152	152	152		149	149	149	148	149	156	156	151	144	147	147	141	152	140	140	153
14	B CUT OFF (C)	128	128	128	129	129	129		128	128	128	130	127	127	127	127	128	129	129	128	128	130	130	125
15	R DRIVE (W)	145	145	145	145	145	145		138	140	140	142	140	141	141	142	134	134	134	133	141	135	135	136
16	R CUT OFF (W)	126	126	126	127	127	127		129	126	126	126	127	127	127	126	130	129	129	128	129	129	129	130
17	G DRIVE (W)	128	128	128	128	128	128		128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128
18	G CUT OFF (W)	128	128	128	128	128	128		128	128	128	128	128	128	128	128	128	128	128	128	128	128	128	128
19	B DRIVE (W)	116	116	116	113	113	113		115	112	112	114	118	116	116	118	118	122	122	115	129	121	121	117
20	B CUT OFF (W)	131	131	131	132	132	132		132	133	133	130	130	132	132	126	130	131	131	132	132	131	131	132
21	H POSI 50Hz	331	331	331	331	331	331						318	158	342	304					315	158	304	260
22	H POSI 60Hz	298	298	298	298	298	298	48	289	146	340	298					279	144	298	252				
23	V POSI 50Hz	39	39	39	39	39	39						41	41	38	32					35	39	36	32
24	V POSI 60Hz	33	33	33	33	33	33	25	34	36	40	35					36	34	38	33				
28	BRIGHT CENT	132	132	132	139	139	139	130	132	132	120	124	135	135	135	120	132	132	110	130	132	132	132	130
29	BRIGHT MAX	200	200	200	170	170	170	150	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170	170
30	BRIGHT MIN	90	90	90	90	90	90	70	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90
31	TINT	114	114	133	114	114	133		144	140	140	123	133	138	133	123	140	133	140	136	128	128	138	138
35	CONTRAST CENTER	144	144	144	132	132	132	104	132	132	132	132	132	132	132	132	132	132	132	124	132	118	116	118
36	CONTRAST MAX	180	180	180	190	190	190	180	176	164	164	164	176	164	164	164	164	164	164	164	168	168	168	164
37	CONTRAST MIN	40	40	40	40	40	40	60	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
38	COLOR CENT	105	105	105	90	90	90		80	65	65	60	80	65	65	60	68	60	65	60	68	60	65	60
39	COLOR MAX	127	127	127	127	127	127		127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127
40	COLOR MIN	00	00	00	00	00	00		00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
41	H POSI TEXT	185	185	185	185	185	185																	
42	V POSI TEXT	80	80	80	80	80	80																	
43	NT COLOR CENT	80	80	80	80	80	80		80	47	45	60	80	47	45	60	60	50	65	60	60	50	65	60
44	NT COLOR MAX	127	127	127	127	127	127		127	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127
45	NT COLOR MIN	00	00	00	00	00	00		00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00

# ELECTRICAL ADJUSTMENTS

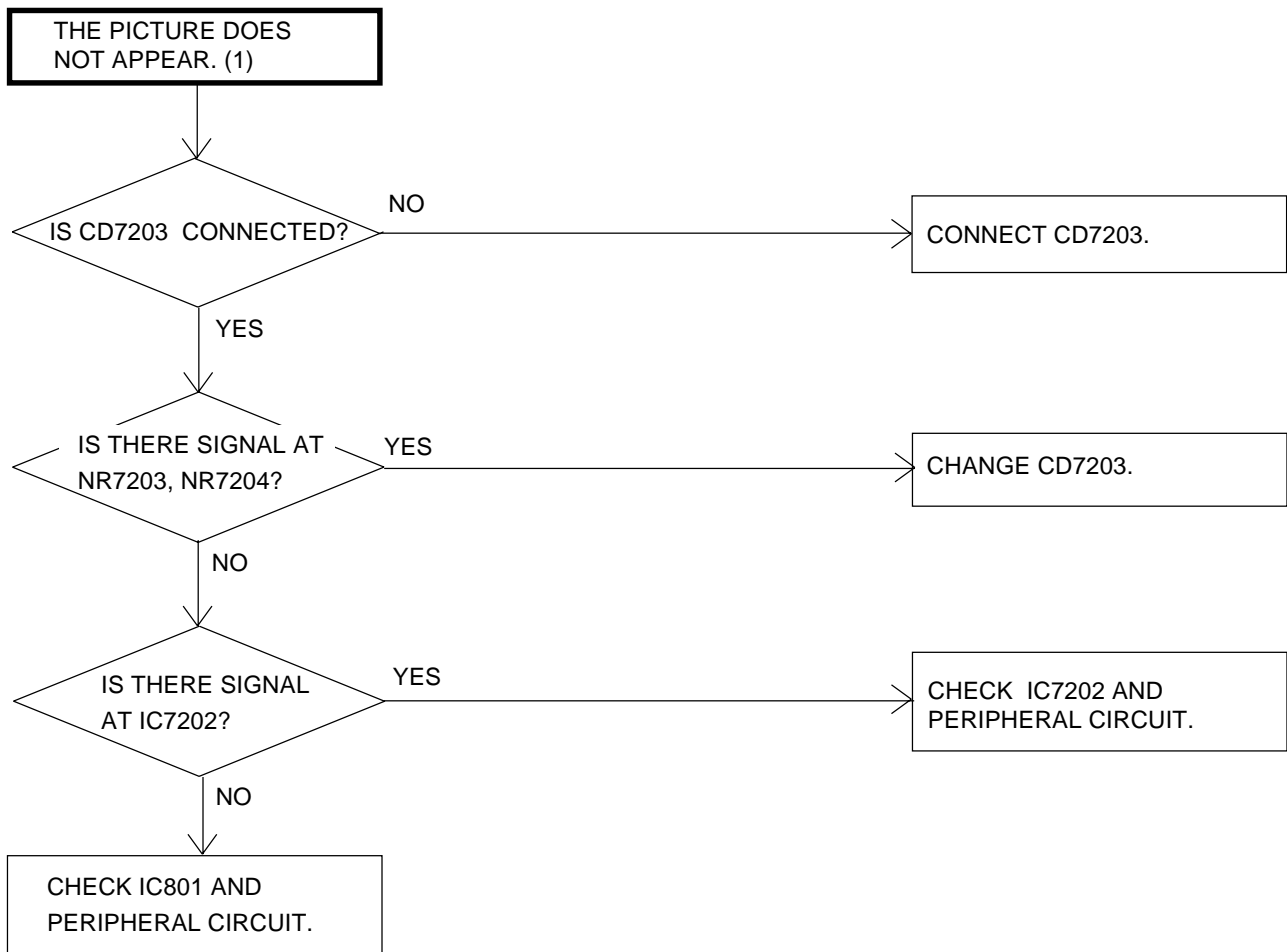
## 3. ELECTRICAL ADJUSTMENT PARTS LOCATION GUIDE (WIRING CONNECTION)



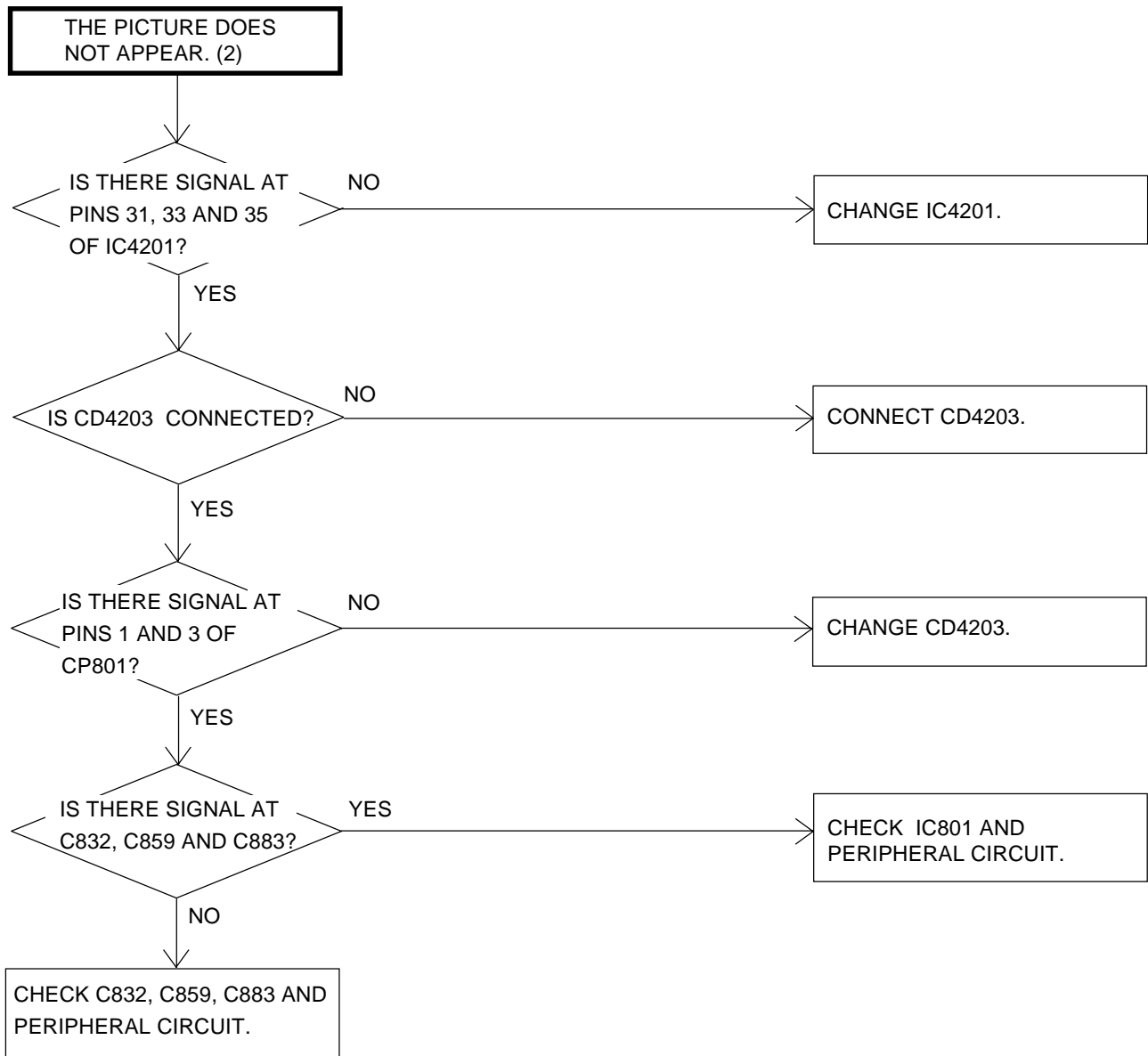
## TROUBLESHOOTING GUIDE



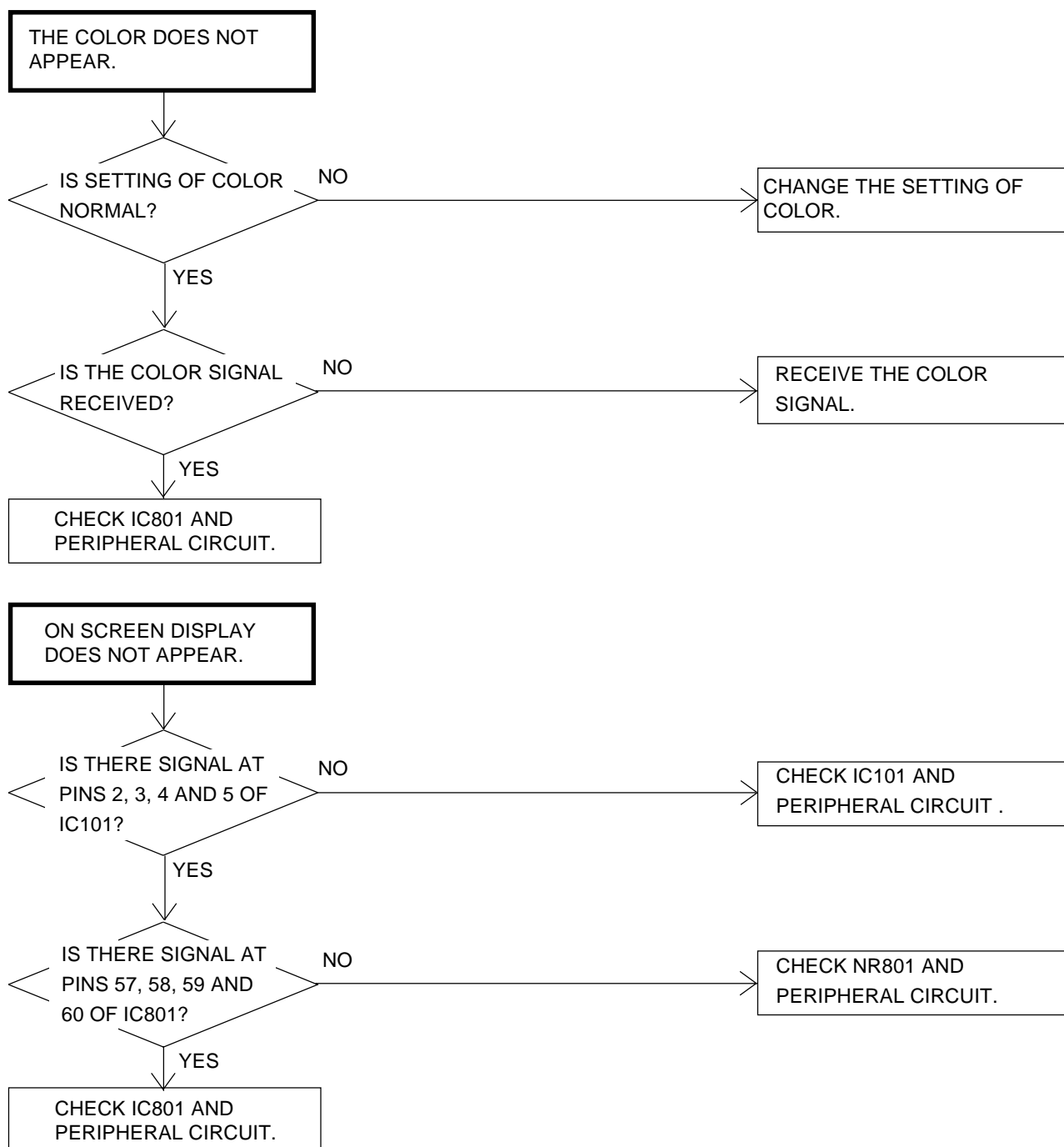
## TROUBLESHOOTING GUIDE



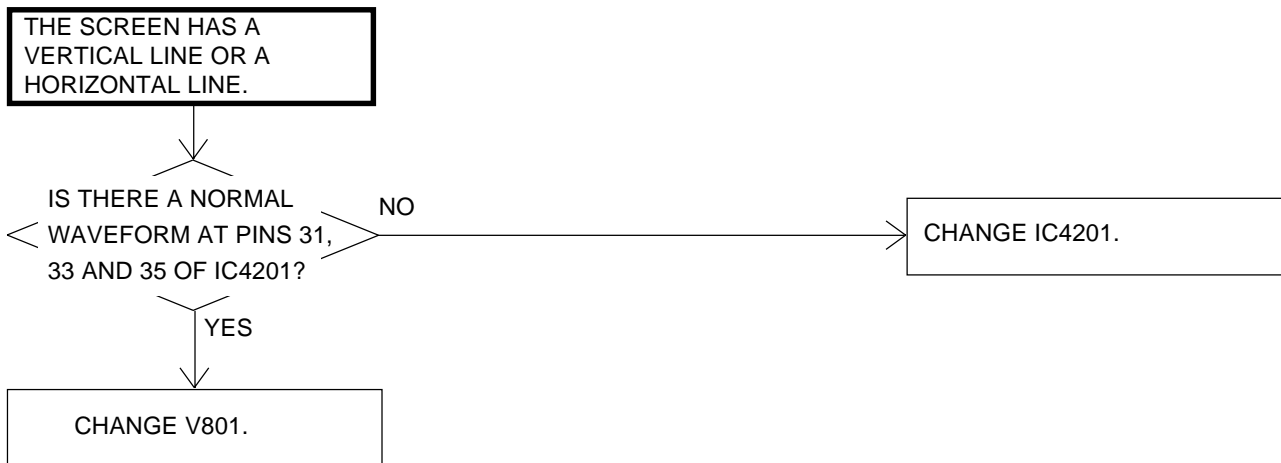
## TROUBLESHOOTING GUIDE



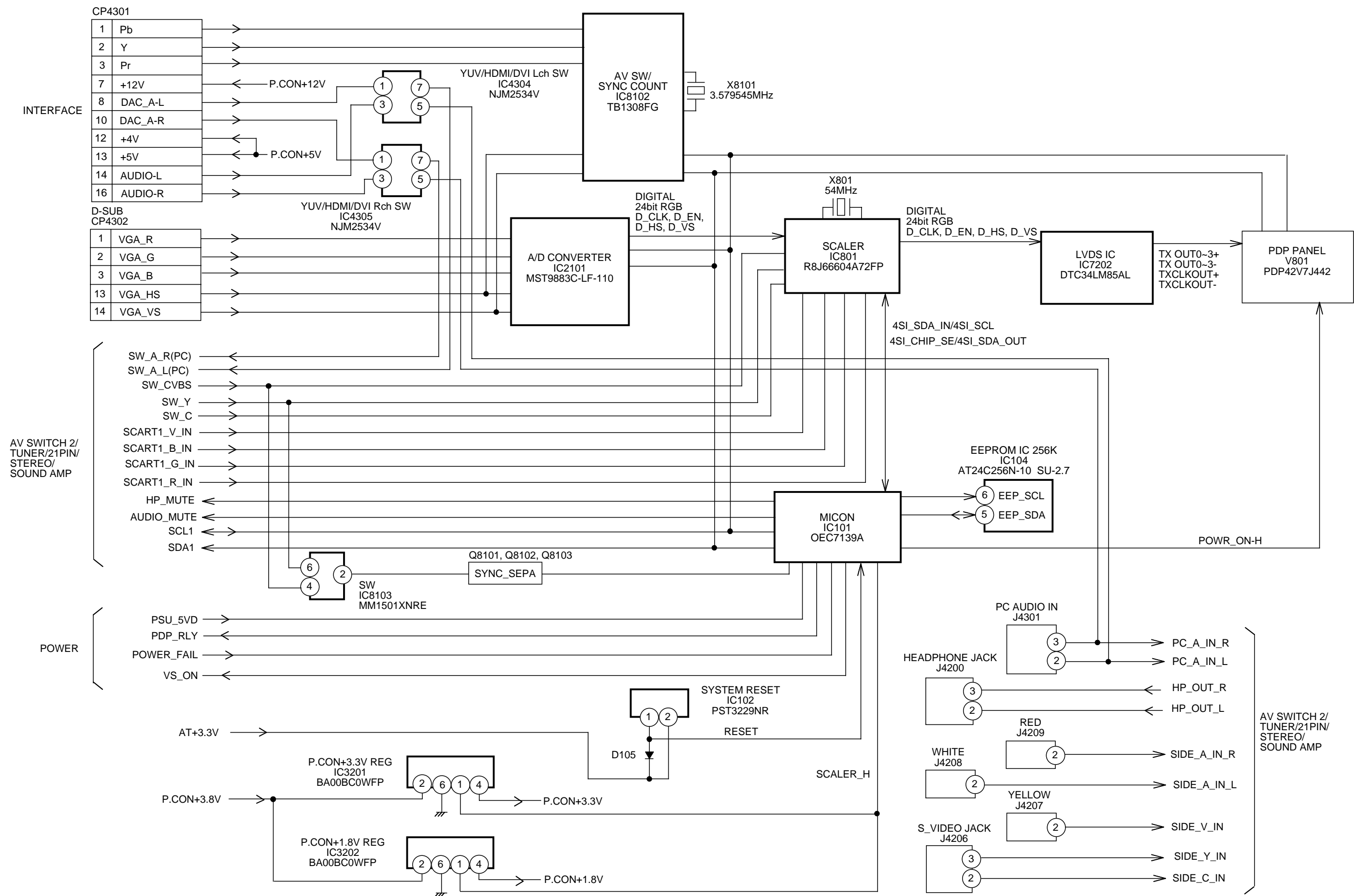
## TROUBLESHOOTING GUIDE



## TROUBLESHOOTING GUIDE

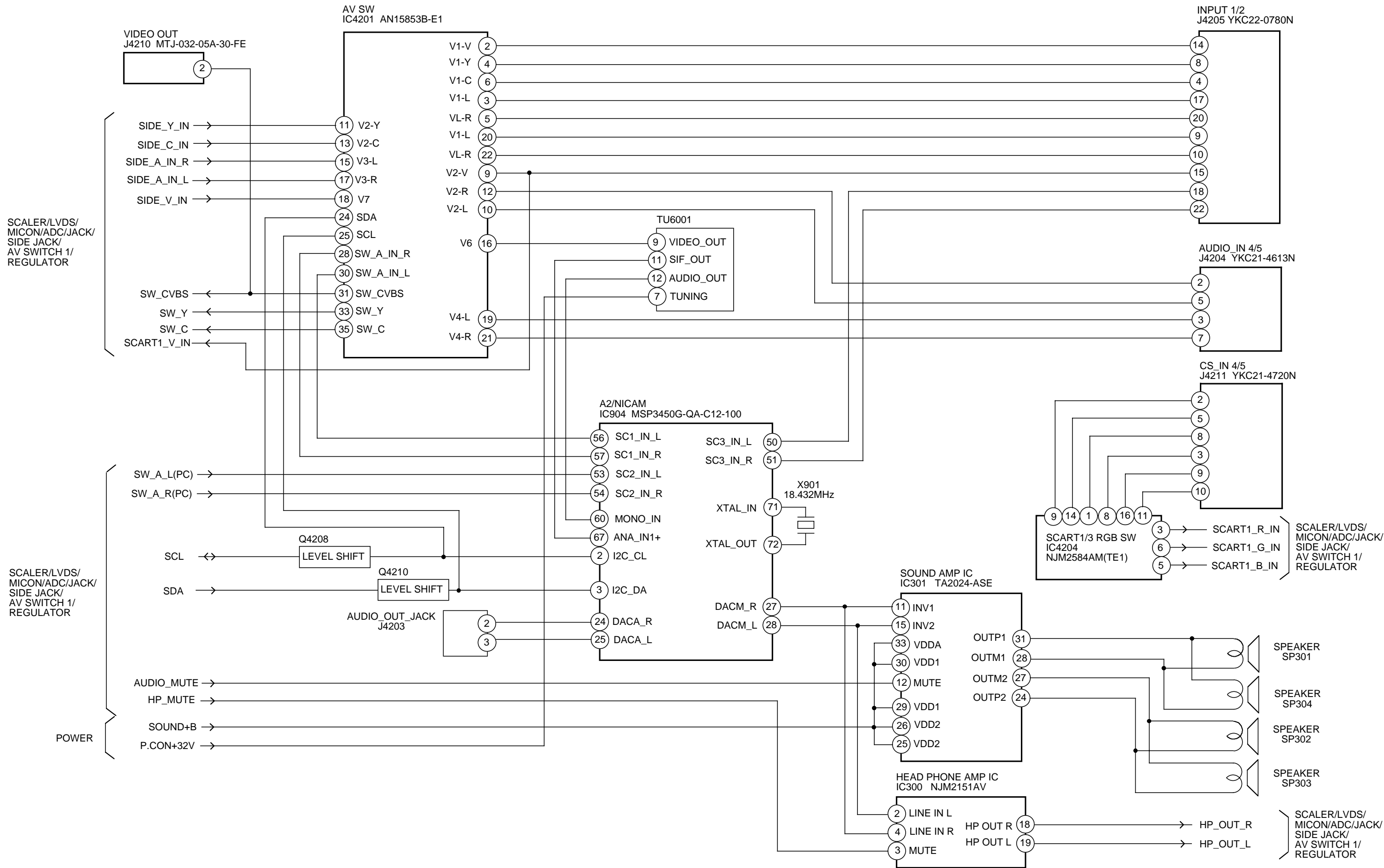


SCALER/LVDS/MICON/ADC/JACK/SIDE JACK/AV SWITCH 1/REGULATOR BLOCK DIAGRAM

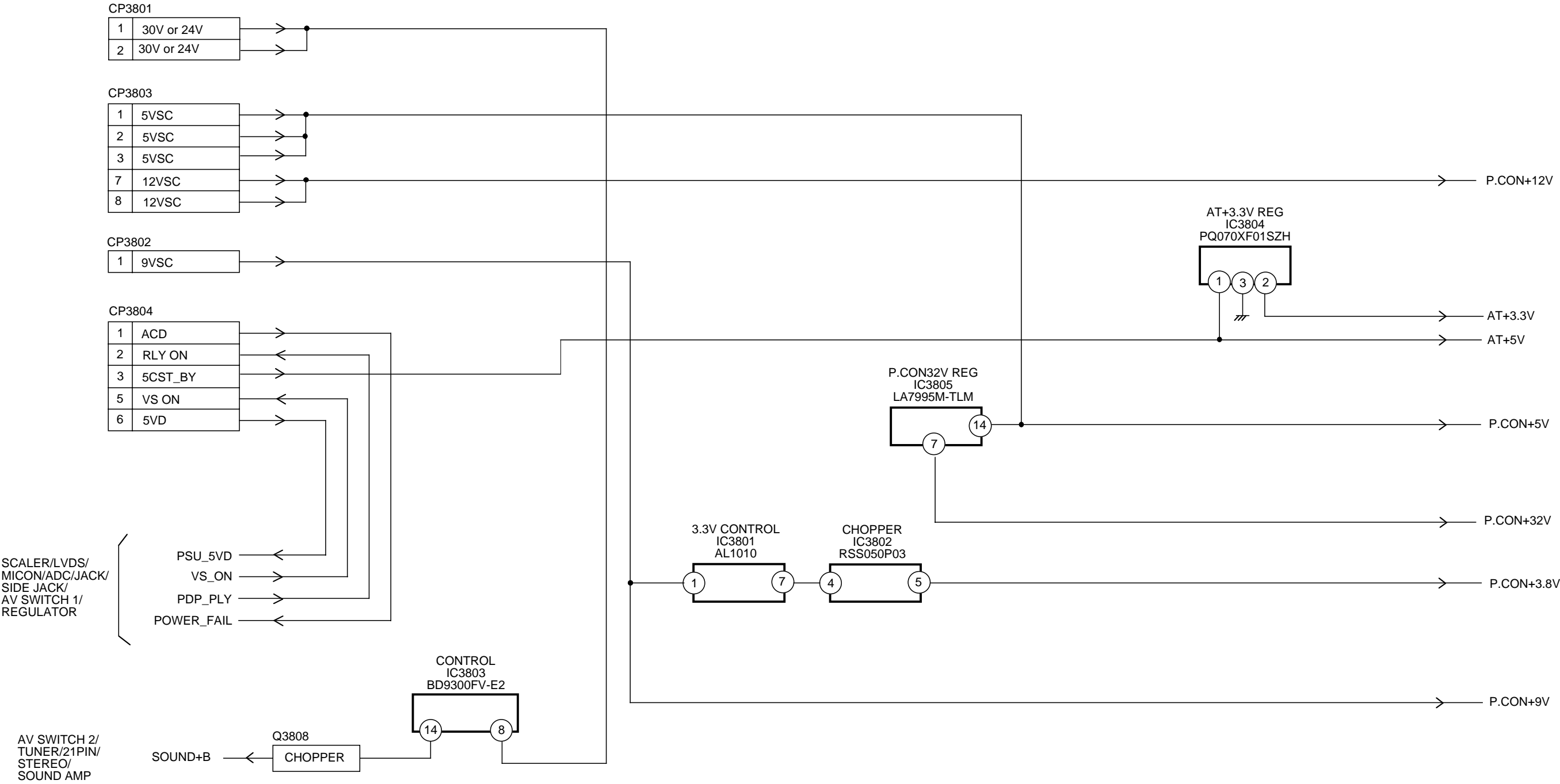




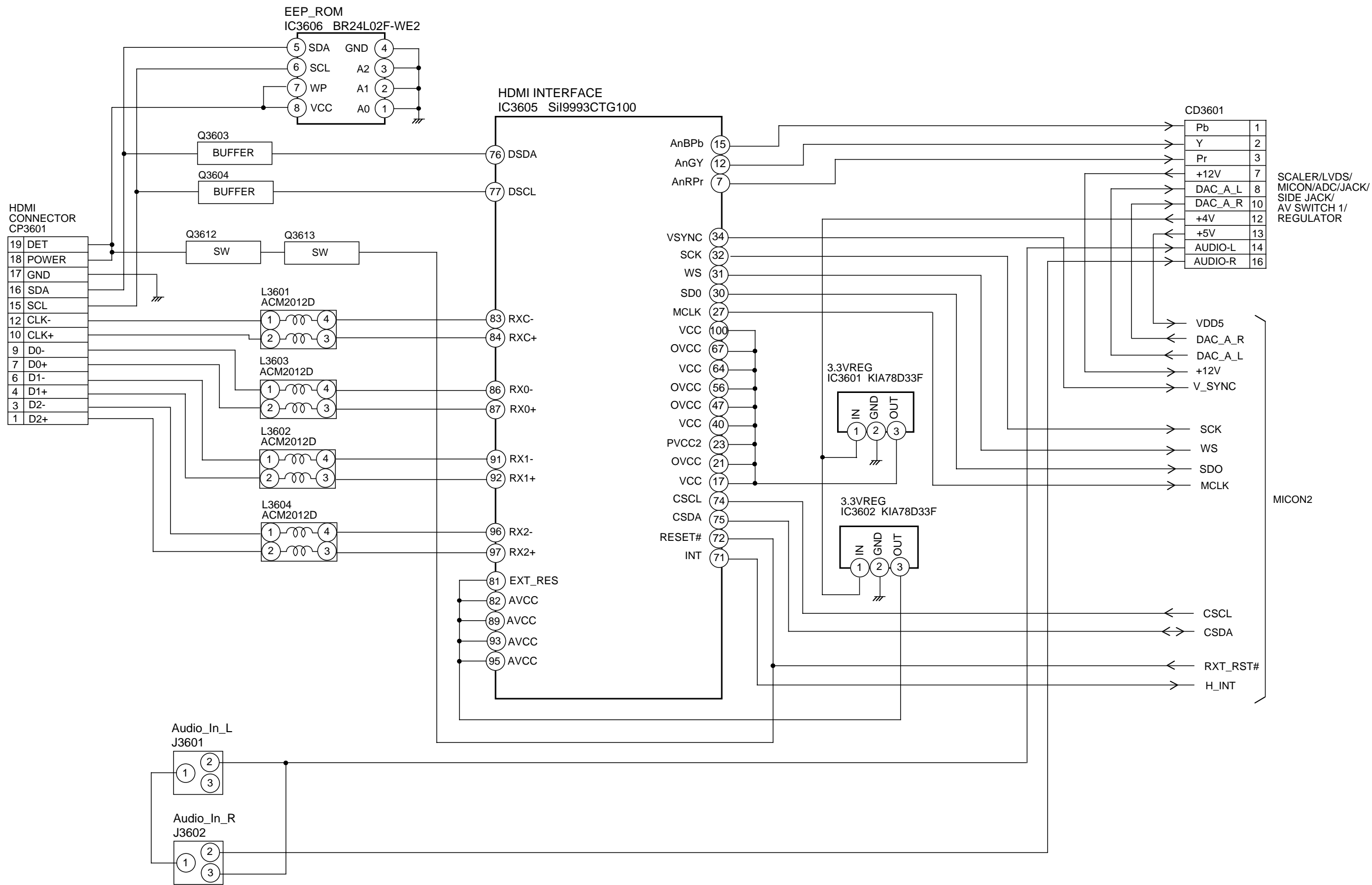
AV SWITCH 2/TUNER/21PIN/STEREO/SOUND AMP BLOCK DIAGRAM



POWER BLOCK DIAGRAM



INTERFACE BLOCK DIAGRAM



MICON2 BLOCK DIAGRAM

